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ORIGINAL COMMUNICATIONS.

Cases of Synovial Articular Inflammation of the Knee, treated successfully with Urate of Ammonia.* By W. E. HORNER, M. D., Prof. of Anatomy in the University of Pennsylvania, Senior Surgeon of the St. Joseph's Hospital, etc.

The liniment of ammonia is so well known in the treatment of chronic articular affections, that its character may be considered as settled; but my attention has been only lately called to the still higher powers of urate of ammonia, an article which, though sufficiently offensive to the olfactories, has a strong compensating quality in the efficiency of its action. My first observation in regard to it was the result of having accidentally been

^{*} This paper was originally read before the Academy of Natural Sciences, on Tuesday December 9th, 1851, though now published by preference in a Medical Journal.

called to a poor woman who was in a state of unremitted and excruciating suffering, day and night, but especially during the latter period, from a chronic inflammation of the knee joint, attended with considerable swelling and tenderness, and some degree of redness. I made to it the ordinary applications of cold fomentations, and evaporating lotions, enjoined rest, attended to her diet and the state of her bowels, and gave opiates at night in the shape of Dover's powder. After ten or twelve days of attendance, in which no progress was made to a cure, I was much gratified on a visit to find that the pain had ceased suddenly, and that the preceding night had been spent in great The strong expression of satisfaction on my part, led to a communication from her, with many apologies for herself, that, finding the disease so little abated, she had been tempted to try the remedy of a simple friend, who had been remarkably improved by it in a similar attack. This remedy was a poultice made of human urine, thickened with potter's clay, and put on as warm as one could bear it; and to be repeated when it got dry. She declared to me that this rather indelicate application had relieved her of all pain in a few hours. The fact of relief was incontestible; the question was in regard to the remedial agency of the article employed, and I therefore determined to make some experiments on the value of ammonia in combination with fine argillacious earth.

Having a similar case shortly afterwards, in the St. Joseph's Hospital, I tried in it a solution of muriate of ammonia formed into a poultice. No very distinct or satisfactory result followed, and it was discontinued. Having the idea still in my mind, and wishing to be satisfied about it, but reluctant to employ the article resorted to by the poor woman, I determined to find my urate of ammonia in some other form of an easy kind, and for that reason adopted the guano, which has so large a proportion of phosphate of lime, urea and of urate of ammonia in it. A female patient, aged 34 years, Mrs. C——, from Tamaqua in this State, who had for more than a year labored under inflammation of the right knee, was put under my charge at the St. Joseph's Hospital, October 8th, 1851. She had been well attended to by Dr. Scherner, who had conducted her through the most acute period of her complaint. The joint had suppurated,

and she came to town with a small fistulous orifice on the inner side of the knee, through which a probe could be easily passed between the tibia and os femoris. From this there came daily a spoonful or more of matter, when a plug was withdrawn from the orifice. She still suffered great pain at night, the part was tender, and was in continual uneasiness, and she had some slight fever in the afternoon. Here was exactly the case to try the efficacy of urate of ammonia, as naturally formed in animals. I accordingly obtained some guano, and had it made into a hot poultice with clay. The joint was kept enveloped in the poultice with frequent changes, for nearly the remainder of the month, at the end of which time a very marked improvement had taken place in the amount of pain, and also in the degree of swelling;

and the purulent discharge had almost ceased.

The application produced a very copious vesication of the knee, and it had to be weakened to reduce the caustic qualities. Having conducted this treatment as far as seemed necessary, the skin was permitted to heal. Some little pain recurring afterwards, she was blistered for it; that getting well, the emplastrum calefaciens was applied, and the leg was also kept supported by an extending band on the ankle, and a counter-extending one on the thigh, their action being sustained by a splint on the outside of the limb. At the end of six weeks, November 25th, she has left the hospital without pain or uneasiness in the knee. joint is in a state of false anchylosis, and straight. I have covered the knee with emplastrum adhesivum, and secured it in that position with strong paste board splints, moulded to the knee; and have recommended her to keep it so for two or three months, until all danger of secondary suppuration be removed. Probably at the end of this time the judicious use of frictions and of Stromeyer's screw splint, may impart some flexion to the limb.

The Hospital record sheet shows the following details of dates, which may be inserted in this place:

Oct. 9. Poultice of guano, (urate of ammonia) and potter's clay, equal parts.

Oct. 10. Poultice has blistered. It was discontinued, and simple cerate applied.

Oct. 11. Patient has less pain; soreness of knee reduced, and

called to a poor woman who was in a state of unremitted and excruciating suffering, day and night, but especially during the latter period, from a chronic inflammation of the knee joint, attended with considerable swelling and tenderness, and some degree of redness. I made to it the ordinary applications of cold fomentations, and evaporating lotions, enjoined rest, attended to her diet and the state of her bowels, and gave opiates at night in the shape of Dover's powder. After ten or twelve days of attendance, in which no progress was made to a cure, I was much gratified on a visit to find that the pain had ceased suddenly, and that the preceding night had been spent in great ease. The strong expression of satisfaction on my part, led to a communication from her, with many apologies for herself, that, finding the disease so little abated, she had been tempted to try the remedy of a simple friend, who had been remarkably improved by it in a similar attack. This remedy was a poultice made of human urine, thickened with potter's clay, and put on as warm as one could bear it; and to be repeated when it got dry. She declared to me that this rather indelicate application had relieved her of all pain in a few hours. The fact of relief was incontestible; the question was in regard to the remedial agency of the article employed, and I therefore determined to make some experiments on the value of ammonia in combination with fine argillacious earth.

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Oct. 11. Patient has less pain; soreness of knee reduced, and

not so much swelling. A poultice with one-third of the urate of ammonia, and two-thirds potter's clay.

Oct. 13. Vesication.

Oct. 14. Quantity of urate reduced to one-fourth of poultice. Treatment continued pretty much in this state to near the end of the month. Vesication by Emplast. Cantharid. about this time, but omitted on record.

Oct. 28. She was permitted to eat as she pleased.

Nov. 5. Emplastrum calefaciens.

Nov. 12. Discontinue emplastrum calefaciens, and re-apply the urate of ammonia as on 14th October.

While this case was in progress, another occurred in a boy who had the knee joint opened by a cut of half an inch or so in length. Synovial inflammation followed, with the ordinary symptoms. Its usual acute-period was passed through, under the depletory antiphlogistic treatment, and with evaporating lotions to the part. The disposition to fall into the chronic state, attended with tumefaction was relieved by five days use of the same argillacious, uro-ammoniacal poultice.

The Ward sheet exhibits the following entries in regard to this case: Patient, Timothy Roach, aged nineteen years, admitted September 23d, a day or two after accident. Knee painful and stiff, somewhat swollen. Rest and fomentations of warm water directed on that day. Also loss of ten ounces of blood from arm.

Sept. 24. Local bleeding by scarified cupping. Fomentations continued.

Oct. 4. Warm fomentations to this date; in the mean time an evident articular effusion has occurred into the synovial membrane of the knee. A blister plaster 4 inches by 4, was then applied.

Oct. 6. Blister plaster 2×3 inches.

Oct. 7. The patient so much relieved from pain as to be permitted to leave his bed and promenade with a crutch.

Oct. 9. Some aching and tumefaction indicated a persistence of articular irritation. The poultice of urate of ammonia (guano) one-fourth, potter's clay three-fourths, was then applied hot, with frequent renewals to the 14th of October, at which time

all the symptoms were relieved. The patient was discharged cured on the 15th.

The above cases are reported much in outline. I shall continue, as opportunity offers, to test the value of the above remedy, and also compare its results with other remedies. It appears to me to have some special qualities, which are of a highly beneficial kind in the affections alluded to. It is so active a revulsive when applied strong, that I have no doubt of their being many cases of serous inflammation in which it may be usefully resorted to. I would here suggest a trial in puerperal peritonitis and in pleurisy. I see no objection except the odour.

The poultice of guano and clay dries very quickly, so that it is better to shield it with oiled silk or India rubber cloth. The clay I look upon as simply a vehicle, but it may also have some physiological action from its physical properties in regard

to moisture.

The analysis of the best guano, by the chemist, presents the following constituents, which are mentioned here for facility of reference. The proportions will vary according to their atmospheric exposure and to the degree of adulteration in trade. As it is an expensive article for agricultural purposes, it has become common to reduce its chemical relations by the addition of common earthy substances:

Uric acid, thirty per cent.

Uric acid with ammonia.

Carbonate of ammonia.

Muriate, oxalate, and phosphate of ammonia.

Free ammonia.

Phosphate of soda.

Phosphate of lime.

Sulphate of potash and soda, and oxalate of lime.

It is the large quantity of ammonia in it which makes it so active a stimulant to vegetable growth, and so disagreeable to the smell. It, however, is not so intolerable medically, as assafetida, an article which we have but little hesitation in prescribing.

A Case of Curious Cutaneous Disease. By S. Weir Mitchell. M. D., of Philadelphia.

Jane —, æt. 13. She had enjoyed good health up to a period about one year previous to the present date, when an eruption of a very peculiar character appeared upon the fore part of her neck, chin, and lips, and, somewhat later, upon the back of her neck. The eruption is but slight, twenty or thirty vesicles being constantly present, and running their course, to be succeeded by others of like nature. Their long continued presence seemed to have exerted no influence upon the little patient's general health; and save the local disfigurement and the constant itching which they occasion, the case might be passed by as one rather to be

cured by time than attacked by remedies.

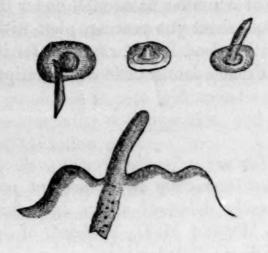
On the 20th of November, the child was brought by the mother to the clinic of the Jefferson Medical College, where I noticed the case in an ante-room. On this, and on several other occasions, I studied the disease with some care, and twice examined the contents of the vesicles with the aid of a microscope. When first seen, the eruption presented the following appearance: Around the lip were about a dozen of minute white vesiscles, with semi-transparent apices filled with a thin serous fluid. These were also to be seen at a more advanced stage, when they began to assume an umbilicoid appearance, like the pustules of small pox, save that they still retained their white hue. In most of the papules, the central prominence now began to harden and to grow outwards; sometimes offering an irregular elevation, at others presenting the singular phenomenon of a pretty regular projection, shaped precisely like a minute finger, and growing from beneath the central elevation, or a little to one side of it. Some of these small horn-like growths stood directly out from the skin, while others hung downwards, being bent at their base. Their length varied greatly, the largest being about two and a half or three lines long.

After a few days, these prominences dried up and fell off, while the base gradually disappeared, the whole process from

beginning to end occupying from a week to ten days.

I secured specimens of the eruption by seizing these projections with forceps and pulling them off. They seemed to draw out of the skin beneath which they appeared to grow, pushing before them, as a cover, the thin membrane of the vesicle. A careful section presented the appearance which I have drawn:

Fig. 1, a.



The fluid contents of the papule were a thin serum, in which the microscope discovered floating a number of yellowish globules, perfectly homogeneous and without nuclei. The peculiar prominences spoken of above, were formed of a mass of these globules, altered by drying, and changed in form by their close juxtaposition.

Fig. 2, b.



These albuminoid bodies varied so greatly in size as to render any measurements useless. They seemed to spring from the skin, and resembled greatly the globules of concrete albumen, which are met with at times in tumors, and not unfrequently upon the skin, in the neighborhood of pimples which are drying

up, etc.

Under the use of arsenic and an ointment of equal parts of mercurial, tar, and sulphur ointments, the eruption rapidly changed its nature to that of a well developed squamous affection which grew better, and indeed, seemed in process of cure when I last saw it.

Another case of a similar nature fell under the notice of my friend, Mr. Brinton, about one year ago; but, with this exception, I know of none other, and I have searched for it in vain among the English and French delineations and descriptions of cutaneous disease.

Extracts from a Lecture "On the present position in Europe of some of the most interesting and important points of Modern Surgery," recently delivered as an Introductory Discourse. By Thomas D. Mütter, M. D., Professor of Surgery in Jefferson Medical College, Philadelphia.

(Continued.)

Opthalmic Surgery, as I anticipated, from the numerous excellent and practical works, which from time to time have appeared from the teeming intellects of Lawrence, Mackenzie, Middlemore, Chelius, Elle, Vidal, Velpeau, Romig, Cullier, Roquetta, and others, I found in a most excellent condition. In truth, no department of our science appears to have been cultivated with more success, and that which, but a few years since, was "chaos and confusion dire," appears to have been touched with the wand of some mighty magician, and is now a bright and connected portraiture of nearly every disease to which the human eye is liable. I cannot, of course, attempt here a survey of the immense mass of novel as well as of useful information with which the science has been enriched by the labors of those to whom I have just referred.

Ovariotomy.—A distinguished philosopher, has classed man among the most cruel of animals; and certainly, were we to restrict our observations to the mere work of the surgeon, without entering

into an investigation of the motives which lead him to the performance of bloody and terrific operations, the example alone, would be sufficient to lend countenance to the assertion, repugnant as it must be to the feelings of every one possessed of the common attribute of humanity. Certain it is, however, that some of our operations may be considered as supporting, to a limited degree, the charge made against our race; and there is none in the whole domain of Surgery better calculated to elicit, even among the profession, a more profound sensation of horror, or better deserves the epithet of cruel, than one recently introduced into practice; and were we not convinced that nothing but a fervent desire to relieve a suffering mortal, could induce a surgeon to undertake its performance, we should at once look upon its author as a being destitute of either sympathy or compassion, and richly deserving the detestation of his fellow men.

The operation to which I refer, is that for the removal of ovarian tumors, by what is called the great incision. In other words, by an incision that extends in a straight line from the cartilago-ensiformis, to the symphisis pubis! It is called the great or major incision, to distinguish it from another operation for the removal of diseased ovaria, in which the opening made into the abdomen extends but a few inches, and which was suggested by William Hunter, but has attained its present reputation in consequence, especially, of the labors of Jeaffreson.

As this subject is attracting a great deal of attention both abroad and at home, it will not be inapposite to furnish you with a slight sketch of its history and present position. It would appear that in consequence of the frequent failure of pure medical means, to relieve dropsy of the ovary, several surgical operations have from time to time been performed. Thus, some have advised "puncture of the cyst, evacuation of its contents, and then injection of some stimulating fluid, for the purpose of exciting adhesive inflammation;" others attempted a cure by making a free incision into the ovary, evacuating its contents and converting the opening into a fistulous sore, (Ledran, Houston, Voisin, &c.) Others again, suggested the removal of a part of the cyst, so as to make it empty its contents into the peritoneal sac, (Blundell, &c.) Acupuncture, with long needles, also has been performed, but the operation usually pre-

ferred has been simple tapping. Indeed, with the exception of the latter, all the others have been, with great wisdom abandoned, and the acknowledged failure of this operation to afford more than temporary relief in many cases, while in others it was follewed by death, induced surgeons to seek for something upon which their confidence could, with greater security, be placed. Accordingly, we find that some fifty years since, L'Aumonier, of Rouen, extirpated an enlarged ovary, under the supposition that it was dropsical. The case turned out, however, to be one of abscess of the organ, and the patient ultimately recovered. This was unquestionably, I believe, the first removal of a diseased ovarium, but soon after, in 1809, Dr. McDowell, of Kentucky, performed the operation in a case of real ovarian dropsy, and the patient recovered. This successful result, induced others to repeat the experiment, and since that period a large number of cases have been reported, and undoubtedly others have been performed, of which no account has been furnished. But at no period, probably, has there existed so much excitement in reference to this operation, as at the present moment, and you will find, as is ever the case, when men allow feeling or interest to obtain a mastery over their judgment, that the most disgraceful acrimony and harshness of language has been indulged in toward each other, by the advocates, as well as the opponents of the measure in question. For my own part, I have endeavored faithfully and cautiously to examine the subject, being prejudiced neither for nor against it, and must confess, from the information now furnished to the world, I am induced to range myself among its opponents, except in cases of unilocular cyst, without adhesions; and even here I deem it altogether unjustifiable, until all other means have proved nugatory, and the fatal termination of the case without it appears inevitable. When had recourse to, it becomes the bounden duty of every surgeon to state candidly its dangers, and the probability of its failure. In order that my opinion may be borne out by sufficient reasons, I beg leave to offer a list of the most prominent objections urged by different authorities to the operation, and which must present themselves at once to every one who carefully investigates the merits of the question.

The objections to the operation, are

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1st, The difficulty of arriving at a just diagnosis.

2d, The danger of the operation itself.

3rd, The nature of the disease does not sanction so violent a remedy.

4th, It is contended that palliatives will often succeed in ren-

dering a patient comfortable during a long life.

5th, An operation does not always succeed in relieving a patient radically, even when she escapes the dangers immediately consequent to its performance.

6th, The disease may terminate spontaneously.

Such are the objections urged against ovariotomy, by the first surgeons of Europe, and I can with perfect truth declare that there is scarcely an eminent man abroad who lends the slightest countenance to the measure.

While we hope that future observations may divest the operation of many of its dangers, and establish a more correct diagnosis in the disease for the relief of which it has been proposed, we sincerely trust that no one will heedlessly attempt so hazardous a procedure, without duly reflecting upon the immense responsibility he assumes.

Plastic Surgery.—You will be anxious, I doubt not, to learn the estimation in which European Surgeons, generally, hold what is called Plastic Surgery. This department of our science, although in reality "old enough to speak for itself," may be considered a comparatively modern invention, for certainly the beautiful and perfect results attained in our time through its agency, far surpass anything that emanated from the hands of its original advocates and inventors, not excepting even the learned Taliacotius himself. These operations were for many years considered almost as fabulous, and have excited the ridicule of the wits of every age, including Butler, Voltaire and the polished Addison; and even now, notwithstanding the positive testimony of the first authorities in their favor, are supposed by many to be bare assertions destitute of truth, and as useless as they are apochryphal. But, gentlemen, both wit and opposition have been tried in vain, and the most distinguished men in Europe unite in awarding to the measure a high and commanding position among the most useful improvements of the age. When such authorities as Graefe, Dieffenbach, Zeis, Chelius, Delpech, Dupuytren, Velpeau, Roux, Lisfranc, Larrey, Blandin, Labat, and Jobert, on the continent, and Brodie, Lawrence, Liston, Stanley, Fergusson, and others of high authority in England, declared their conviction of its utility, Plastic Surgery may be considered as having fought its battles, and will soon rest under the ægis of an established operation.

Lithontripsy.—One of the most striking characteristics of our nature is, that which leads us to doubt the value of every project or scheme originating with another. We cannot realize at once the fact, that some one else has discovered and brought to light something of which our own faculties have never taken cognizance; and hence we admit its importance with hesitation, or boldly declare the statement of its advocates to be false, and contrary to reason or experience. Probably no operation in surgery more fully illustrates the correctness of these remarks, than lithotrity or lithontripsy. From the period of its introduction into practice by Leroy D'Etioles, Civiale, Heurteloup, and others, it has had to contend with fierce, violent, and most unjust opposition; and even down to the present moment, you will find surgeons decry. ing both the grinding and crushing processes, and declaring them to be, in the majority of cases, of no avail, while in others, they are positively murderous.

With the view of ascertaining the precise estimate placed upon the measure in Europe, I took especial pains to enquire of the surgeons in London and Paris, as to what was the real condition of the operation in their respective cities. In both I found it in high repute, but more especially was this the case in Paris. In the latter city, the dexterous and excellent surgeons, Civiale and Leroy d'Etioles, perform it almost daily; and while they acknowlege that lithotomy is still the operation best suited to many cases, they yet contend that it is far more dangerous, and gives rise to much more suffering than lithontripsy. This is certainly correct, and no one who gives the operation a fair trial, can hesitate for a moment to arrive at the same conclusion. No one contends that it is to supersede the use of the knife, but it is obvious that it must ere long be considered by far the safest and least painful mode of removing a stone from the bladder of an adult, unless the case be complicated with lesions of other organs in the vicinity. I may remark, that the original operation of

lithotrity has given place almost entirely to the more modern one of lithontripsy. Of Liethectasy, I heard but little, either in London or Paris, and the operation, though still recommended by some, cannot be considered as one at all popular with the profes-

sion at large.

Hypodermatomy.—No operation of modern times has attracted more attention, excited more controversy, been more shamefully abused, or unjustly lauded, than what has been termed by Sedillot, Hypodermatomy or sub-cutaneous section, and which has been, in some shape or other, so extensively employed for the relief of various deformities. As I have long been known as the advocate of this measure, when restricted to its proper limits, I made its investigation one of my principal objects, and it was with no little gratification, I assure you, that I found all operating surgeons, without exception I believe, while they reprobated its careless and indiscreet employment, declaring their entire confidence in the operation, when properly and judiciously practised. In short whenever I put the question, "What is your estimate of sub-cutaneous section in reference to deformities?" to any distinguished surgeon, either in England or on the continent, his answer was invariably this, "I consider it one of the greatest improvements in modern surgery, and cannot conceive that any surgeon who studies the result of the operation with care and fairness, can arrive at any other conclusion." Recollect this then, when you hear the method decried by those who have either never given it due attention, and are thus incompetent to decide upon its merits, or, who oppose it on what they consider correct principles, and are perfectly honest in this belief, (and I respect them for it,) or, who finally condemn it from prejudice alone. And rely upon it, that every surgeon abroad considers the various modifications of sub-cutaneous surgery, especial tenotomy, aponeurotomy, and myotomy, as the least dangerous, least painful and most useful, of all our means for the relief of deformities of various kinds.

Stricture.—A good deal of controversy is now going on in Europe in reference to the new treatment of stricture of the urethra by perineal section, proposed by Mr. Syme, of Edinburgh. That the operation may possibly prove useful in certain difficult cases of permanent stricture is possible, but that it can ever become a popular or necessary operation in the vast majority of cases of

this disease, is scarcely probable. For the present, however, we are unable to speak decidedly upon this point, as the method has yet to be subjected to the test of observation and experience.

Aneurism .- You are all aware of the terrible nature of aneurism; one of the most fearful diseases to contemplate in its progress, as well as one of the most difficult to manage with success. The danger attendant upon the usual operation for this affection, and the failure of the old method of treatment by compression, induced, a few years since, Mr. Hutton, of Dublin, and afterwards Drs. Cusack, Bellingham, Kirby and Harrison, of the same city, to attempt its cure by a new application of compression, called by them intermittent or irregular. I found surgeons very much divided in opinion relative to the merits of this new measure, and several very unfortunate cases in which it was employed, were recently announced in the London Hospitals. From my own observations, however, and from what I could gather from some of the most experienced of those who had employed it, I am led to consider the plan one of the most important improvements in modern surgery. It can never entirely supersede the use of the ligature, but it will answer in a great majority of cases.

Parotid Gland.—As extirpation of the Parotid Gland has given rise to much controversy on this side of the Atlantic, I was anxious to ascertain the estimate placed upon the measure by surgeons abroad; and therefore made it a subject of diligent enquiry. As I anticipated, their exists great contrariety of opinion in relation to the utility of the process, but I found none who doubted its possibility. Indeed, the question seemed to bear almost exclusively

upon the first proposition.

(To be continued.)

Fecundity of a Free-Martin. By Joseph Moore, of the Jefferson Medical College, and of Cumberland Co., New Jersey. (Communicated by Professor Dunglison.)

Professor Dunglison,

DEAR SIR,—I herewith forward you a newspaper, published in the town where I reside, in which is a communication from a very intelligent farmer, relating to a free-martin which he raised on his farm, and which not only received the male, but gave birth to a healthy offspring. The gentleman who is the author of the communication, I have known for several years, and can therefore vouch both for his intelligence and veracity.

As a knowledge of such cases is not devoid of interest to persons devoted to scientific pursuits, I write the accompanying note, for the purpose of adding my testimony to the truth of the gentleman's communication, as he is, most likely, unknown to yourself.

Very respectfully,

JOSEPH MOORE.

Philadelphia, Jan. 7th, 1852.

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From the West Jersey Pioneer, Oct. 15th, 1851.

A NUT FOR THE CURIOUS.—On the 5th of the 6th month, 1849, one of my cows dropped two calves, a male and female, and on the 11th inst. the latter dropped a calf, healthy and strong, and has the appearance of making a good cow. I have never heard of a similar instance.

Respectfully,

BENJAMIN SHEPPARD.

This case disproves the correctness of the commonly received opinion, that the female of twin calves is invariably barren and unfruitful.

BIBLIOGRAPHICAL NOTICES.

A practical Treatise on the Diseases of the Lungs and Heart, including the Principles of Physical Diagnosis. By Walter Hayle Walshe, M. D., Professor of the Principles and Practice of Medicine, and of Clinical Medicine, in University College, London; Physician to the University College Hospital, &c. 12mo. pp. 512. Philadelphia: Blanchard & Lea, 1851.

Most of our readers are, doubtless, familiar with the Essays which have placed Professor Walshe's reputation so high on the list of the scientific medical writers of Great Britain—his treatise on Cancer, and on "Adventitious Products," the last published in the Cyclopædia of Anatomy and Physiology. His public claims to practical skill in the diagnosis and treatment of the class of diseases to which the volume whose title we have above copied refers, have hitherto chiefly rested upon his Clinical Lectures,

published in the Lancet, a report on Phthisis in the Brit. and For. Med. Rev., and a little book entitled "The Physical Diagnosis of diseases of the Lungs," published in 1842. This latter was reprinted in this country, in 1843, and found great favor with the profession. The present volume has a much wider range than its predecessor, as is evident from its different entitulation. We propose to exhibit to our readers its plan and scope.

Part 1st.—The first chapter treats of the physical examination of the Lungs,—by means of Inspection, application of the hand, Mensuration, Percussion, Auscultation, Succussion, and by determination of the situation of surrounding parts and organs. The second chapter is occupied with the physical examination of the Heart and great vessels, conducted by methods similar to

those employed in the examination of the lungs.

Part 2d.—Applies these principles of investigation to the study of the diseases of the Lungs, Heart, and Aorta; each disease of these organs respectively being separately considered in sufficient detail.

The volume is pretty equally divided between these two

portions.

Many persons suppose that the recognition of diseases of the chest by physical exploration is a very simple and easy process; one which requires only the hearing ear, and the seeing eye. But this is a great mistake; and it is an error, too, which has given rise to very many wrong diagnoses, and brought much discredit on the method pursued. Others ridicule the whole procedure. Some years ago, we heard an eminent professor of the Theory and Practice of Medicine, who was at times facetious, assure a large class of students that it was nonsense to attempt to ascertain the existence of disease in the chest by the use of the stethoscope. Said he, "you might as well study astronomy with the aid of a clyster-pipe." Nor was the professor far astray, if the examiner rely only upon his ear, and not also upon his reasoning faculties.

There is no branch of practical medicine in which there is greater necessity for the exercise of sound judgment, careful discrimination, and logical inference, than this. The mind must be trained and educated, as well as the senses of hearing, touch and sight, before a physician can be considered a reliable investi-

gator of the diseases of the thoracic organs.

The perusal of Dr. Walshe's treatise, will abundantly satisfy any one of these truths. We do not observe anything particularly novel in the plan which the author has adopted; but he exposes in a very striking manner the difficulties and sources of error which may perplex and mislead the examiner. Indeed, we do not remember to have seen in any other treatise on this subject, these points so well set forth. And in like manner his explanation of the difficulties, and of the means by which they may be overcome, and a correct opinion arrived at in spite of them, is equally satisfactory.

We shall now glance at a few of the prominent topics discussed.

After describing the method of conducting an examination of the chest by simple inspection, the application of the hand to its different regions, and mensuration, the author alludes to a means of diagnosis as to the amount of disease in the lungs, which has at different times attracted considerable attention, viz., by measuring the cubic inches of air which can be expelled from the chest by the fullest possible expiration, succeeding the fullest

possible inspiration.

The instrument contrived by Dr. Hutchinson, which he terms the spirometer, is unquestionably the best adapted to ascertain this fact. By means of this apparatus, it will be recollected, this gentleman has ascertained that there exists a general ratio of proportion between the volume of air which the lungs in health are capable of containing, and the height of the individual. The mean quantity is 174 cubic inches for the height of 5 feet; and for every additional inch of stature from five to six feet, eight cubic inches of air, at the temperature of 60° F., are expelled by a forced expiration. Dr. Walshe admits the correctness of this law, in the main; but he very properly objects to its specific accuracy in practice, on the ground that however truly it may coincide with general results, "the individual healthy standard occasionally varies very widely on either side of the general one; so much so, that a great fall may have taken place, from disease, in the breathing-volume of an individual, at a time when he expels a quantity of air above the average standard of men above his height; according to the general standard he is more than

healthy, he is extra-capacious; according to his own, he is diseased. For certainty of observation the individual standard is required; the present man must be compared with the past man, and not with other men. Again, a fall below the general average, is a surer indication of disease than the maintenance of the general average, or even a slight excess, is of health." During the last few years, we have had the opportunity of testing pretty fully the applicability of the spirometrical guage; and we can most heartily agree with Dr. Walshe in the necessity of comparing the cubic capability of the lungs of the individual in disease of these organs, with that of the same in health, before any reliable opinion can be formed as to the existence or non-existence of pneumonic disease. And even then we do not think that we have any sufficient warranty for concluding that the reduced respiratory volume indicates affection of the respiratory organs; the difficulty may be entirely exterior to these, and seated in the moving powers of respiration, -in the spinal cord or nerves-or it may be due to imperfect development of the respiratory muscles.

The chapter on Percussion is very thoroughly studied, and contains a full statement of all the important details respecting this means of diagnosis.

The chapter on Auscultation as applied to the respiratory organs, occupies rather more than eighty pages—a proportion of the whole volume, which is not too large, considering the importance of the subject. In it we find remarks appertaining to all the questions which are likely to arise in the mind of any one who is studying this matter; not only are general directions given with reference to the practice of auscultation, but all the instances, so far as we can recall them, are adduced in which the particular auscultatory phenomena are observed, together with the explanation of this occurrence. It may be objected that the author refines too much for the necessities of practice. But we The mere fact that many may be confused by do not think so. multiplicity of detail, and be led into mistakes rather than benefited thereby, is no argument against the propriety of adopting any arrangement of subdivisions and nomenclature which will enable the student to arrive at the whole truth. We are sometimes afraid, it would seem, that we may become too accurately informed.

With regard to some of the auscultatory signs, Dr. Walshe thinks the crepitant rhonchus of Pneumonia "occurs in the parenchyma of the lung itself, especially in those portions of it immediately contiguous to, and actually forming the walls of, the ultimate termination of the bronchi; and that its physical cause is the sudden and forcible expansion of that parenchyma, glued together, as it were, by exudation with which it is infiltrated. Each single crepitus or click would thus signify the expansion of a cell, and be produced by the unfolding of surrounding glutinous tissue necessary for that expansion. "(p. 113.) This, it will be noted, is not the ordinarily admitted rationale. Another explanation which is at least equally satisfactory, fixes the seat of this rhonchus within the air-cells, and ascribes it to the separation of their agglutinated walls.

The peculiarities of the cavernous rhonchus, and the sources

of fallacy connected with it, are well exposed.

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In his observations on the adventitious sounds produced in diseases of the pleura, the author refers to the occurrence of friction sound in emphysema of the lungs without pleurisy. (p. 123.) Laënnec first stated the possibility of this coincidence, and indeed considered it as highly important in the diagnosis of emphysema; but most subsequent authorities have denied this connection. Dr. Walshe is inclined, however, from cases which he has witnessed, and others of which he possesses records, to agree with Laënnec so far as to admit that it does happen in some instances that a friction sound is occasioned in emphysema beneath the pleura, by which the latter is rendered irregular and rough.

Some curious remarks are made upon "pleural pseudo-rhonchi," (p. 126) showing that a sound similar to that of the sub-crepitant rhonchus may be produced entirely exterior to the lungs, in the pleura, or rather in fluid contained in the meshes of adventitous tissue existing upon the pleura, in the movements of this

membrane during respiration.

We are compelled to pass over the remainder of this chapter, exceedingly rich though it be in details concerning the phenomena of vocal auscultation, if we may so speak; indeed, we do not know where else this subject is so thoroughly and lucidly discussed.

The chapter which follows, on the physical examination of the

heart and great vessels, occupies about as much space as the last, and is equally well worthy of perusal. We can call attention only to a few points from amongst the many which are presented to us.

Dr. Walshe does not attempt to explain the manner in which the impulse of the heart is produced, but ascribes it, as is ordinarily done, to the systole of the ventricles, without giving us his reasons for the opinion. This theory is open to objections, and we regret that the accomplished author of the treatise under consideration has not favored us with a critical examination of the question. It seems to us that the weight of evidence is in favor of the theory which attributes the heart's impulse against the walls of the chest to the diastole of the ventricle, which is rendered forcible by the active contraction of the auricle whereby the ventricle becomes filled with blood. The arguments in favor of this view are briefly but clearly stated by Dr. Stillé in the American Journal of Medical Sciences, July, 1846, p. 174, and also in his excellent treatise on General Pathology; they are also detailed at greater length by Hardi et Béhier, "Pathologie Interne," p. 326, vol. 1. To these sources we would refer our readers. The facts upon which these arguments are based, are derived from observations of the motions of the heart of the frog, which is transparent, and which is not disturbed in its action by the interference with the function of respiration which is unavoidable when vivisection is practised upon a warm-blooded animal; from watching the movements of the heart of the human being, when, as has not unfrequently happened, the anterior parietes of the chest have been congenitally wanting over the cardiac region, or have been removed by accident; and finally, from study of the phenomena presented in certain pathological conditions of the organ. "When the heart of the frog, which is transparent, is examined, the apex is seen to be thrust forward at the same instant that all the dimensions of the organ are enlarged, and its color shows it to be distended with blood; while the apex is retracted simultaneously with the lessening of the size, and the disappearance of the color of the heart; in other words, the projection of the apex corresponds with the diastole, and its retraction with the systole of the ventricle." (Stille's, Gen. Pathol. p. 319.) In a case reported by Cruveilhier, in

which a child was born with a deficiency in the upper part of the sternum through which the heart projected, and in which life continued for nine hours, the contraction of the auricles was seen to be exactly synchronous with the diastole of the ventricles. During the ventricular systole, the heart contracted in every diameter, and the only portion of it which was thrust forward was the apex, and that with a slow spiral motion. The diastole of these cavities, on the contrary, was accomplished with rapidity and energy, "so that the hand which had been closed upon the heart was opened with violence." A case similar to this was reported by Dr. Robinson of Va., in the American Journal, Feb. 1833; and we have very recently read the account of another analogous to these, but we have, unfortunately, forgotten where it is recorded. Finally, M. Beau, (Archives Gen. de Médécine, Dec. 1835, p. 426; July 1841, p. 300, Dr. Corrigan of Dublin, and Dr. Stillé (Am. Journ. loc. cit.,) have shown that the analysis of reported cases of hypertrophy of the heart establishes the fact that, in simple hypertrophy of the ventricles, of any degree, the impulse is diminished or entirely wanting, unless there be corresponding hypertrophy of the auricles. From these statements it is evident that the cardiac impulse cannot be admitted to depend upon the ventricular systole alone, as is taught by Dr. Walshe. If the view here advocated be the correct one, it must be allowed too, to modify the author's explanation of the mode in which the first sound of the heart is produced; for, certainly, the active contraction of the auricles and the rushing of the blood through the auriculo-ventricular orifices must generate a sound. And, inasmuch as the ventricular systole follows instantly upon that of the auricles, the sounds generated by the two acts, together with the violent impetus of the blood against the now tense tricuspid and mitral valves, and the rushing of the torrent through the aortic and pulmonary openings, will sufficiently account for the dull, prolonged first sound.

In the application of percussion to the heart, to ascertain its boundaries and exact situation, we are glad to see that Dr. Walshe recognizes the importance of the suggestion first made by Drs. Camman and Clark, of New York, in favor of using the stethoscope while percussion is practiced. This combination certainly makes the investigation more satisfactory in doubt-

ful cases; but it requires considerable familiarity with the practical manipulation, to make it a convenient means of

diagnosis.

Everything relating to the modification of the normal action and sounds of the heart produced by diseases, both of this organ and of organs exterior to it, is most instructively considered.

We now pass to that portion of the book which is devoted to the Diseases of the thoracic viscera. This, as we before remarked, occupies about one half of the volume, a space not large enough, indeed, to enable the author to be as minute and thorough as his readers would desire; but we can assure them that his powers of compressing and condensing the results of his enlarged experience and logical study, have been exercised in a most remarkable manner. We shall ask attention to only a few

topics.

His remarks on dilatation of the bronchial tubes are admirable. After alluding to the secondary effects produced by this abnormal condition, he thus points out the means of distinguishing it from phthisis. "In phthisis, percussion is dull above the clavicle; not so in dilated bronchus; below the clavicle, too, the dulness is greater and more extensive in the former than in the latter case. The signs of the tubercular excavation are found at the apex; those of dilated bronchus generally lower-say at the union of the middle with the upper third of the chest. When tubercle has reached the excavation stage, flattening at the surface is habitually more marked under the clavicle than it ever is in bronchial dilatation. I have never known hemoptysis produced by chronic bronchitis, with dilatation alone; if it exist, and there be no evidence of mitral disease, the evidence that the excavation is tuberculous, becomes a matter of necessity. Extreme emaciation does not, so far as I have seen, come of the bronchial disease alone. The course of the physical signs will avail us also, if the case continue for a time under observation. In phthisis, the signs are, as a rule, constantly increasing in degree and extent; in bronchial dilatation, they may remain for months unaltered in both these respects; dulness under percussion, as remarked by Dr. Stokes, precedes the signs of cavity in phthisis, and does not occur till after them in bronchial dilatation; to the latter clause, however, I have seen exceptions."

Page 250.

The subject of Pleurisy, in all its varieties, is very ably treated. Concerning the prognosis, he says: "Death is so rare a result of the disease, when attacking individuals free from organic affections, that I have neither myself (and I have carefully attended to this point, since my attention was first drawn to it, years ago, by M. Louis) lost a patient from pure primary idiopathic pleurisy, with or without effusion, nor known of an occurrence of the kind in the practice of others." (Page 269.) The treatment recommended for the acute stage consists in moderate depletion, general and local; slight mercurialization; and the application of a blister over the neighborhood of the chiefly affected part, rather than over the spot itself. If fluid accumulate, or remain long in the cavity of the chest, flying blisters in succession, and ioduretted liniments should be employed externally, and diuretics internally; among the latter, Dr. Walshe advises the tincture of iodine, in scruple doses, freely diluted.

The author's remarks concerning the propriety of paracentesis, the time of its performance, &c. are well conceived. He agrees with most recent authoritative writers, in recommending its early performance, after the physician has become satisfied that absorp-

tion has not taken place under proper treatment.

Pneumonia, as might have been anticipated, receives its full share of consideration. The author admits that in some instances, as when the closure of the bronchial tubes is very extensive, and the conducting powers of the lung are, in some inappreciable manner, annulled, the physical signs may be wholly wanting, excepting that of dulness on percussion; that simple pneumonia, without pleuritic effusion of any kind, may produce expansion, and, subsequently, contraction of the chest; that the old fashioned practice of very large and repeated bleedings is unwise and unnecessary; that tartar emetic is a remedy of vast importance in the treatment of this disease, and that "mercurials appear to him to be desirable in those cases only, where, for some cause or other, antimony is inadmissible." We cannot too highly commend this section of the volume, and we regret that our limits will not permit us to make copious extracts from

it, for there is scarcely a question of interest which does not receive light from Dr. Walshe's observations.

The section on Phthisis is one of the ablest in the book, and this is a warm eulogium where all are good. Few physicians have had so extensive opportunities for studying this disease as the author of this treatise, and none are better qualified for the task. The points to which especial attention is herein devoted are, the significancy of hæmorrhage as a symptom of phthisis; the means of arriving at the diagnosis of the incipiency of this affection; and the efficacy of treatment in curing or mitigating it. He thinks that cod-liver oil "more rapidly and effectually induces improvement in the general and local symptoms than any other known agent," but that the degree and permanency of its curative powers, are not yet determined sufficiently; he prefers the brown oil to either of the other varieties. "The dose of the oil at the outset should never exceed, (often fall short of,) a drachm twice daily; it may be taken in milk, water, orange-wine, or any other aromatic water agreeable to the patient. I have never seen any good, but often ill, effects to follow the attempts to pour in large quantities." Page 360.

An interesting section is allotted by the author to the diagnosis of intra-thoracic tumor, which is of great consequence, as it is so easily confounded with aneurism.

Diseases of the heart and large vessels, occupy rather more than one hundred pages of the volume. We should like very much to review this portion of the book carefully, and to quote from it for the edification of our readers. But the details into which we have been tempted by our admiration of that part of the work which we have already noticed, make it necessary that we shall proportionably neglect this. It contains, notwithstanding, abundant food for study and profitable search. But we must here bring our remarks to a close, assuring those who may have followed us thus far, that the excellence of the treatise is the same to the very end. We can unhesitatingly recommend it as the best in the language.

The Transactions of the American Medical Association, Instituted 1847, Vol. iv. pp. 677.

The present volume of Transactions lacks none of the interest and merit which have distinguished its predecessors. It presents unequivocal evidence of the increasing vigor of the body from which it emanates; which, although yet in its infancy, is beginning to be felt through the whole medical profession of the United States. It is true, that on the great question of reform in the existing methods of medical education, the primary object of its organization, the Association has, as yet, made but little practical progress. It has, however, raised its standard and announced its wishes, and despite the efforts of the few who deem all such movements as chimerical or meddlesome, the great body of its members have steadfastly adhered to their original ground, and are determined to move forward until the united influence of the profession shall secure a more thorough system of

education than has yet been realized. The Report on Medical Education contained within the volume before us, affords ample evidence of the interest taken by the Committee in this branch of the business of the Association. It is an able and high-toned document, full and candid in its exposure of existing evils, and hopeful in its anticipations for the future. "Association," says the Report, "is the great means of creating, and bringing into action, a sound public sentiment amongst medical men," And again: "If all who desire that the standard of medical character and attainment be raised, would turn their influence into this channel, a great change would at once be effected in the condition of the profession of this country. The demi-quacks who so much disgrace our profession in the eyes of the public, would be driven from our ranks, public sentiment, both among medical men and in the community at large, would be renovated, and, consequently, the value of professional reputation would rise, while that of a merely popular one would fall, even as a source of emolument. A reform in our system of education would be rigorously prosecuted, and our schools would cease to send forth such numbers, as some

often do, of unqualified physicians, to give currency to error, and delusion in medicine, to destroy health and life, and to bring

contempt upon our noble science."

This testimony in favor of the value of association as the primary means of improving and elevating the profession, enforced as it is by many clear and cogent arguments, deserves the serious and renewed attention of medical men; and each one who becomes convinced of the simple proposition, that it is by this means that the desired reforms in medical education and character are to be obtained, has a plain course before him. Let him join the medical organization of his district; or if none exists, let him use his influence with his brethren to form one, which shall be governed by the regulations pointed out by the National or State Medical Society, of which it should form a component part. Let him not be a mere nominal or idle member of such a body; but turning aside from his personal duties and professional cares, let him devote a portion of his time and talents to give it character and efficiency.

In connection with this subject of medical organizations, we were gratified to notice that certain resolutions of the Philadelphia County Medical Society, proposing a modification in the present system of delegation to the National Association, were brought before the meeting at Charleston, by Dr. Yardley of this city, and received a respectful consideration, by being referred to a committee of five members with instructions to report

next year.

The change proposed by the resolutions consists in so altering the constitution of the National Medical Association, as to make the delegates consist only of persons appointed by the County and State Medical Societies. It is obvious that by this arrangement a powerful motive would be created for the formation of these local Societies, as furnishing the only doors of entrance to the National Association, and hence, a more thorough and effective organization of the medical men of the country would be promoted.

If this be the main hope of the friends of medical progress, the grand lever whereby the incubus of ignorance and incompetency is to be removed, we can see no more effectual method of promoting it than by the adoption of the change recommended

by the Philadelphia Society.

We repeat then, that the able report and resolutions on Medical Education, from the pen of Dr. W. Hooker, of Connecticut, together with the project for amending the constitution to which we here refer, afford gratifying evidence of a progressive movement in the right direction, and we think that those most skeptical of the advantages of association, must admit that there is at least an earnestness and uniformity in the action of this great national body, which, whatever may be its future influence on the interests of the medical profession, must command the respect and deference of every member of it, who is alive to the

true interests of his calling.

Another important feature in the proceedings of the last meeting, is the change effected in the mode of bringing medical papers before the Association. The original plan of presenting elaborate reports on the progress of the different branches of medical science during the year, has been superseded by the appointment of Committees to consider and report upon special subjects of inquiry, selected as most suitable for investigation. The selection for the coming year embraces twenty-seven subjects, most of which possess high interest to the medical enquirer. Should these committees fulfil their duty in a creditable manner, a vast fund of useful information will be thrown before the profession, upon a variety of important topics, while the character of the Association as a scientific body will be greatly enhanced, both at home and abroad.

As an additional means of securing valuable contributions, it was agreed to invite volunteer papers upon any subject which their authors may choose, to be presented to the Association at the discretion of a committee appointed to receive them and to judge of their merits; and, in order to stimulate talent by competition, a prize of fifty dollars, or a gold medal of that value, will be awarded to the authors of each of the five papers presented to the Association, which the committee shall consider the most meritorious.

These measures we cannot but esteem as highly important, in imparting to the Association a new element of strength and usefulness, by attracting towards it cultivated minds, and making flow. We believe there are many young men in our profession, gifted with a high order of talent, who suffer their minds to languish and grow dull, for want of a stimulus to exertion, such as is here held out. By entering the list of competitors for the honorable position now offered to their acceptance, latent powers will be developed, and new energies will be aroused which may lead to success, and exert a powerful influence on the future life of the aspirant. Already has the successful candidate for the first prize essay presented to the Association, obtained a position amongst his compeers, which years of studious toil might not have secured him, had not his labors been directed into this particular channel.

Another matter which appears to have claimed the attention of the Association, was the subject of demonstrative midwifery. This was specially referred to the committee on medical education by the last meeting; and has received from it a full, candid, and deliberate examination. The conclusion of the committee is against the plan adopted by the Institution which introduced

the subject to the notice of the Association.

"Granting," says the Committee, "all that can be claimed with any plausibility for the advantages mentioned, they are not of sufficient value to make it proper, that woman, in the hour of her extremity, should be made the subject of public exhibition."

This report was deemed of sufficient importance to call for the passage of a resolution confirming the opinions thus advanced, and, so far as its unanimous approval by the Association is an index of the general sentiment of the profession, it is clear and decided.

One other matter in the minutes attracted our attention, and though not of great importance, we feel constrained briefly to call the attention of our readers to it. It is a resolution of Dr. A. H. Stevens, of New York, for the appointment of a committee to procure a tablet with a suitable inscription, commemorative of the Charleston meeting, and in order "signalize the gratitude of the members for the extraordinary professional and social enjoyment that accompanied it."

Now no one can doubt that our medical brethren in Charleston

did everything which kindness and hospitality could suggest, to render the visit of the members of the Association to their city agreeable and even memorable; but in this respect, they did no more than their feelings prompted, or than the profession in other cities have done, and may do hereafter. It was, therefore, unnecessary, and may even be deemed invidious, to signalize their kindness by extraordinary proceedings, and we cannot but regret that the Association departed from its accustomed course in so doing.

The reports of the standing and special committees cover 500 pages of the volume before us. They embrace the usual amount of matter of scientific interest, and are drawn up with decided

ability.

It would be impossible, within our limits, to analyze the vast amount of material thus presented, and we shall attempt no more than a brief notice of such points as seem to possess ex-

traordinary interest.

The report on "Practical Medicine" from the pen of Dr. Austin Flint, of Buffalo, is especially interesting, from its containing a history of several remarkable epidemics, which have prevailed in various sections of the Union during the year, such as cholera, epidemic dysentery, typhoid fever, dengue, &c. It is true, that these reports have reference to a few only of the epidemic diseases of the year, and those prevailing in limited sections; yet, as contributions to the meagre fund of knowledge which we possess on this important branch of medicine, they must be highly prized:

"Epidemic cholera, (says the report,) has prevailed to a considerable extent within the limits of the United States during the past year, and, as heretofore, its progress has been attended by a large fatality. Its ravages have been confined chiefly to places situated on or near the Mississippi and Ohio Rivers, the north-western lakes, more especially the two former, and to California. In the States situated on the Atlantic coast, and between the latter and the Alleghany Mountains, it does not appear that the disease has prevailed as an epidemic.

Prof. Alanson Clark, of the N. Y. College of Physicians and Surgeons, in a letter to the chairman of the committee, states that, on inquiring of numerous practitioners of the city of New York if they had met with the disease, the answer was uniformly that they had not,

nor had they heard of a single case.

He adds that, on applying at the city inspector's office, he found seven deaths had been reported as caused by cholera, one of these being in

June, and six in July; but of the correctness of the diagnosis in these cases he is not fully assured.

"At Boston, the occurrence of a single case only has been chronicled

during the year.

"No reports of cases occurring at Philadelphia, Baltimore or other places within the territory stated to have been exempt from the epidemic, have fallen under notice. Reports more or less full, in medical journals, and communications addressed to the committee, furnish historical accounts of the disease as it has prevailed at New Orleans (La.), St. Louis (Mo.), Louisville (Ky.), Cincinnati (Ohio), Columbus (Ohio), Keokuk and Burlington (Iowa), Kalamazoo (Mich.), Chicago, (Ill.), Buffalo (N. Y.), and Sacramento (California). The committee will notice the more important facts contained in the several reports, and then offer such remarks as may suggest themselves."

A succinct, and in some cases, highly interesting history of the disease as it prevailed in different localities, follows, and the result is thus summed up by the Committee:

"The accounts that have thus been submitted are far from affording a complete representation of the progress of cholera during the past year. They relate to the epidemic only as it existed at several prominent places, and they are, in general, defective in not embracing various particulars of importance in the history of the disease. Places on the great western rivers and lakes, from which no authentic reports have been made, have suffered more or less. The disease is also known to have prevailed to a considerable extent on the vessels navigating these waters.

"The majority of places from which accounts have been presented, are connected with each other by a continuous water communication, by means of which an extensive commercial intercourse is kept up, forming, also, a thoroughfare for a large proportion of the immense tide of foreign and domestic immigration. This fact, probably, in the minds of some persons, will give rise to an inquiry respecting the transportation of the disease successively to these places. With reference to this inquiry, it is to be observed that, as it would seem, to New Orleans belongs priority in the presence of the disease, it having been at no time absent from that city, although never prevailing to a great extent, and in a great measure confined to foreign immigrants. Louisville, it appeared in two successive short outbreaks in June and July, the determining causes being traceable to local sources. At Cincinnati, it prevailed from June to the 15th of August. At Chicago, from the 23d of June to September 1st. At Buffalo, it can hardly be said to have prevailed as an epidemic, but the greater number of cases occurred in July, August and September. With reference to the present inquiry, it is much to be regretted that accurate reports have not been made of the occurrence of the disease at numerous places on the same extensive routes of water communication. The fact that the disease was in a great measure limited to these routes, appearing in but

few other portions of the United States, is worthy of note in this connection. It appears that in all the places that have been mentioned, in which statements relative to the point are made, the development of the disease was preceded by cases occurring among persons lately arrived from other places in which the disease existed. The uniformity of this fact invests it with a certain degree of significance; but, it is to be observed that these cases frequently preceded for a considerable length of time, nor did the subsequent indigenous cases have any apparent connection with them. Although, as just stated, the epidemic is generally preceded by imported cases, the converse is not true, viz., that the importation of cases is uniformly followed by indigenous cases. The history of the epidemic, moreover, in most of the places mentioned in this report, shows, not only a commencement at a period more or less remote and disconnected from the introduction of the disease, but a career which seems necessarily to involve a prevailing epidemic influence having a limited duration, which we should suppose would be otherwise if each case contributed, in any manner, to the special cause. In view of these considerations, while it must be admitted that the transportation of cases from one place to another apparently has some

As an appendix to this section of the report, is an admirable paper by Dr. George Mendenhall, entitled, "An account of Cholera as it appeared in Cincinnati during the year 1850," and a "Report on Fevers, &c., of New Orleans, by Dr. E. D. Fenner," which contains a history of epidemic cholera as it appeared in that city.

connection with the subsequent development of the disease in the latter, the nature and extent of this relation cannot, in the present state of

science, be defined or explained."

Epidemic dysentery has appeared in some sections of the United States, during the year, but the extent of its prevalence, and the peculiar circumstances attending its origin, could not be ascertained by the few facts presented to the Committee. A point of great interest developed by the reports received on this subject, is the account given by different contributors of the treatment found most successful in their hands. The conclusions to be drawn from these are thus announced by the Committee:

"Considering the great diversities of character which an epidemic disease is apt to assume in different sections of country and seasons—diversities from which dysentery is certainly not more exempt than other epidemics—the practical views of a pretty large number of observers, which are presented in the foregoing collection, exhibit, in some important features, a uniformity which is worthy of note. It is to be considered, moreover, in this view of the subject, that the different observers, by whom these practical views are contributed, are not only

remotely situated with respect to each other, but there is no reason to suppose that the several communications had any connection with each other, by way of suggestion, or otherwise.

"In so far as the facts and opinions embraced in these communications are to be considered as supplying data for an induction, the several conclusions may be summed up as follows:

"a. In the management of epidemic dysentery, as it has prevailed at the places and periods referred to in the papers that have been contributed on the subject during the past year, depletion by blood-letting, cathartics, and the free use of mercurials, are not required, but will be likely to do harm.

"b. Opium, exhibited in decided doses, exerts a salutary influence in relieving painful symptoms, and controlling the severity of the

disease.

"c. The nitrate of silver is a valuable remedy, employed with a view to a local and general effect.

"d. Tannic acid, and the acetate of lead, under circumstances

denoting the propriety of astringents, are useful remedies.

"e. To support the powers of the system by a timely resort to tonics, stimulants and alimentation, is an important end to be kept in view in the treatment.

"These propositions embody therapeutical principles by no means entirely new, and it is difficult to ascertain to what extent they are in conformity with prevailing opinions. The committee, therefore, are unable to say in how far they are to be considered in the light of an improvement in the management of the affection to which they

An epidemic fever of a singular character, prevailed during the year in many of the Southern States, under the name of Dengue, or "break-bone fever." An excellent descriptive history of this singular epidemic is contained in the report before us, the main features of which we would gladly transfer to our pages, did not our limited space forbid. We can only refer to the sources from which the materials for this history were derived, in order that any of our readers, who may feel inclined, can examine for themselves, viz: "A history of the Epidemic Dengue, as it prevailed in Charleston in the Summer of 1850," by Prof. Samuel Henry Dickson, of the Medical College of South Carolina, published in the Charleston Medical Journal and Review, November, 1850. "History of the Break-bone fever, an epidemic which prevailed in Charleston in the Summer of 1850, by Wm. T. Wragg, M. D.," same Journal, March, 1851. "History and treatment of the Dengue fever, prevailing in Augusta, in the year 1850, by Henry F. Campbell, M. D.," Southern Medical and Surgical Journal, Jan. 1851.

The Report on Surgery, by Dr. Paul F. Eve, opens with a brief description of the value of anæsthetic agents, in which the Committee express an "undiminished confidence in them, and a grateful admiration of the blessings they have conferred upon mankind."

Several cases of cure of Aneurism by compression, are reported amongst the events of the past year, with many other cases and operations of interest, furnished to the Committee by numerous contributors.

The report is accompanied by several elaborate and valuable surgical papers. Amongst them, Dr. Washington L. Atlee's table of all the known operations for Ovariotomy, from 1701 to 1851, comprising 222 cases, with a synoptical history of each case; and the surgical statistics of the New York Hospital, compiled from the hospital records by Frederick D. Lente, M. D., are especially worthy of notice.

The results of the operation in the 222 cases of ovariotomy, collected by Dr. Atlee, are thus summed up:

"I. Of these 222 cases, 52 were of the minor section, 153 of the major, and 17 unknown.

"II. Of the 52 minor operations, 39 recovered, and 13 died, or 1 in

every 4, or 25 cases in 100.

"III. Of the 153 major operations, 95 recovered, and 58 died, or 1 in every 237 or 37 91 cases in 100.

in every $2\frac{37}{58}$, or 37.91 cases in 100. "IV. Of the 17 unknown sections, 12 recovered, and 5 died, or 1 in every $3\frac{2}{5}$, or 29.41 cases in 100.

"V. Of the 222 cases, 146 recovered, and 76 died, or 1 in every $2\frac{35}{38}$, or 33.78 cases in 100.

"VI. Of the 222 cases, 57 were not completed, or 1 in every 3 17-19ths, or 25.68 cases in 100.

"VII. Of the 222 cases, there was no tumor in 6, or 1 in every 37, or 2.7 cases in 100.

"VIII. Of the 57 unfinished operations, 24 were the large section, 27 the small, and 6 unknown.

"IX. Of the 24 unfinished large sections, 17 recovered, and 7 died, or 1 in every 3 3-7ths, or 29.17 cases in 100. The proportion of unfinished operations in the large sections, is as 24 to 153, or 15.69 cases in 100.

"X. Of the 27 unfinished minor sections, 23 recovered, and 4 died, or 1 in every 63, or 14.81 cases in 100. The proportion of unfinished operations in the small sections, is as 27 to 52, or 51.92 cases in 100.

"XI. Of the 6 unfinished unknown sections, 5 recovered and 1 died, or 1 in every 6, or 16² cases in 100.

"XII. Of the 57 unfinished operations, 45 recovered and 12 died, or 1 in every 4\frac{3}{4} cases, or 21.05 cases in 100.

"XIII. Of the 57 unfinished operations, 25 were merely exploratory,

all of which recovered.

"XIV. Of the 6 operations in which no tumor was found, 5 were major and 1 minor; 3 of the former recovered, 2 died; and the minor recovered; making 4 recoveries, 2 deaths, or 1 in every 3."

The rate of mortality after the operation according to the

above table, is 261 per cent.

The Report of the Committee on Obstetrics, by Dr. D. Humphreys Storer, covers over fifty pages of the Transactions, and contains a full resumé of the facts and interesting or important cases, in this department, which have been brought to the knowledge of the committee, through the medium of the Medical Journals published during the year. It is a valuable annual abstract of this branch of medicine, and may be consulted with

advantage by the practitioner.

We have already referred to several important matters discussed in Dr. Hooker's admirable Report on Medical Education, and might, with advantage, present to our readers a full analysis of it under its appropriate head; but our limits forbid us to do more than to commend its careful perusal to the members of the profession generally, believing, as we do, that it contains a lucid and forcible argument of the necessity of reform in our system of medical education, together with the true principles upon which such a reform should be based. We were gratified in observing amongst the proceedings of the Association, the following resolution in reference to this report, which we cordially recommend to the bodies to which it refers: "Resolved, That it be recommended to the several State Medical Societies throughout the Union, to procure a re-publication of the Report of the Committee on Medical Education, for general distribution among the profession."

This recommendation is now the more imperative from the fact that, owing to a late calamitous fire in Philadelphia, the larger part of the edition of the present volume was consumed, leaving but a little over 500 hundred copies for distribution; thus cutting off the great body of the profession from the read-

ing of this and the other reports.

The report on Medical Literature, Dr. Thomas Reyburn,

Chairman, contains a full and satisfactory review of the periodical medical literature of the year, with some excellent observations on the general tone and character of the productions which appear in the Medical Journals, and the means calculated to improve them. The Committee complain of the indisposition of Editors to contribute to their own pages, and of their want of care in correcting the contributions of their correspondents. "More of original contributory matter," says the Committee, and strict supervision of their columns on the part of the Editors, would, we are convinced, improve the character of this important department of our literature, and are most certainly portions of editorial duty due to readers, by virtue of implied contract with them."

One section of this report is occupied with an able and ingenious disquisition upon the causes and circumstances which are impeding the growth of American medical literature, and which make it so inferior to the European, together with suggestions as to the best means of fostering and improving it.

The committee attribute much to the establishment and influence of scientific societies of a high grade, as a means of arousing an impulse to literary effort. The following extract upon this point is worthy of attention:

"The organization of the National Medical Association has aroused a feeling of interest, and awakened a spirit of inquiry into the state of the profession, which need only to be taken advantage of, for the furtherance of the end we have in view. Men from the far west, the borders of civilization, have left their weary round of toil, toil so weary that one might fancy it to engender hatred of the profession which exacts so much for the bread of life, to gather to its councils; the wealthy southerner has roused from his reputed indolence, and journeyed even to the distant north to glean some lessons in professional wisdom; and will it be said that, where such sacrifices are made through love of profession, greater, far greater, will not be made through the laudable ambition of identifying themselves with that profession in after years, of giving to it some record of their knowledge or experience, which will register their names upon its annals?

"It is no novelty advanced that the successful practitioner is by no means always the most scientific light in his profession. We all know and feel, unfortunately, that manner, more than matter, wins the human heart; and we all know, from records of others, even if we have not seen such, that many a gem in our profession drags on life wearily, from want of encouragement from public favor, whilst many a shallow pretender palms off charlatanry for professional skill, and rides pros-

perously on the breath of public applause through mere suavity of manner and polish of address. That this ever has been, and ever will be the case, none can doubt. But it is equally certain that, in Europe, merit in dire indigence, and talent in obscure poverty, are rescued from oblivion by the recognition of its labors by scientific bodies, the ability and justice of whose members are a sufficient guarantee to pass current the coin they stamp. Many a name, before which the practitioner in America might pause with a feeling of veneration, almost of envy, would have gone down to the grave unhonored and unknown, crushed by the bitter struggle with poverty, had not a medal or an honorary membership, aroused first friends, then neighbors, and, lastly, the reluctant, fawning world, to appreciation of merit which spoke not for itself; and many a name even now familiar to our ears as noble in our profession, has yet no light to cheer on labor, has earned as yet little reward for toil, save the recommendations to public favor of which we speak. These have ever been found powerful impulses to exertion, and we will not believe that in our country they would prove less able incentives."

With these views the Committee regard with favor the formation of a society, in connection with the National Medical Association, "for the reception and discussion of original scientific papers;" a measure which is partially accomplished in another way, by the changes adopted in the organization of the committees, to which we have already referred.

A highly interesting report on Hygiene, from the pen of Dr. Gailliard, of Charleston, completes the series. This report is confined to the following special subjects of inquiry, viz:

First, The best methods of warming and ventilating public and private buildings.

Secondly, The importance of collecting, in connection with our system of meteorological records, information in regard to the diseases of the different parts of the country; a subject presented to the notice of the Association by the Smithsonian Institute.

Thirdly, The consideration of the following Preamble and Resolution:

"Whereas, The clerical profession often, though perhaps sometimes unwarily, yield their extensive influence in the community to give currency to quackery and quack medicines, therefore,

Resolved, That this subject be referred to the Committee on Hygiene, to consider and report at the next meeting of the Association."

The importance of the subjects discussed in this report, and the ability with which they are handled, cause us to regret that so few of the members of the profession will have an opportunity of perusing them. We would, therefore, hope either that one or more of the Medical Journals would publish the report in full, or that local Medical Societies would print editions for extensive circulation.

The volume closes with the Prize Essay, which is an elaborate and valuable paper, "On the Corpus Luteum of Menstruation

and Pregnancy," by John C. Dalton, Jr., M. D.

This essay is embellished with a series of highly finished colored plates, illustrative of the subject, introduced at considerable expense, and highly creditable to American art. It is, we believe, universally regarded as a rich original contribution to Physiology, evincing on the part of the author a high order of talent, and greatly enhancing the value of the present volume of Transactions.

The essay covers about 100 pages, but as it will be issued in a separate volume, and from its character would seem to demand from us a distinct notice, we shall forbear even a statement of its contents at this time.

P.

The Microscopic Anatomy of the Human Body in Health and Disease. Illustrated with numerous drawings in colors. By Arthur Hill Hassall, M. D., author of a "History of Fresh Water Algæ," Fellow of the Linnæan Society, &c. &c. With additions to the text and plates, and an introduction containing instructions in Microscopic Manipulations. By Henry Vanarsdale, M. D. In two volumes. New York: Pratt, Woodward & Co. 1851.

All who are interested in the study of Microscopic Anatomy, and to whom the above work in its English dress, is doubtless familiar, will be pleased to learn that it has been re-printed in this country, and enriched by the additions of the American editor in the shape of an introduction, and many original American and other drawings. We have watched with great pleasure, the growing interest and zeal which have been of late manifested in

this country, in this teeming field, and we refer with pride to the observations of our own micrographers, now beginning to be recognized as authorities all over the world. For many years we have been content to see with foreign eyes and foreign glasses, and to receive as matters of faith, all that has reached us from distant observers. Now we have our own instruments, unexcelled by those of the first English and continental opticians, and our own observers, patient and faithful, upon whom we can rely with confidence for confirmation of all that reaches us. The increasing demand for, and popularity of books upon this and kindred subjects, is the best evidence of the truth of what we have advanced; and in the one before us, we discover what has long been wanting in the English literature of this subject; for the works of Henlé, Lebert, Donné, Robin, Mandl, and others, were "sealed books" to those unfamiliar with the language in which they were written.

One of the main objects of the author of the present volume has been to collect from the various scientific and other journals, the contributions of his own countrymen, and to combine them into a whole, at the same time introducing the labors of other observers, as they served to exemplify the various subjects treated of. Of the American edition we feel that we cannot speak too warmly in praise. It combines all the high scientific characteristics of the original, which are given to us unmutilated, and which render it invaluable to the advanced student in Physiological and Pathological histology, together with an introduction by the Editor, that is admirably adapted to beginners, in which are full descriptions of the different foreign and domestic instruments, and their accessories, the mode of preparation and preservation of objects, together with the fluids used for mounting objects, and the methods of performing this operation; all described in a clear, simple style, that cannot fail to be understood by the merest tyro in microscopy.

It would be a "labor of love" for us to follow the author step by step, through the various departments of the work, did our limits allow, and to exhibit to our readers all that has been done by him and others; but the very nature of the work, in which so much is taught by demonstrative plates, as well as our restricted space, forbid this. We must rest content with the hearty recommendation to all who love the subject, to possess themselves of this admirable work, with the assurance, that their most sanguine

expectation will not be disappointed.

One word, as to the "getting up" of the American Edition. It has rarely been our lot to meet a more elegantly executed work, both as regards plates, paper, typography, &c.; it reflects the highest credit upon all concerned. Ten additional plates have been added to the original, together with several wood cuts. The work appears in two volumes, one of which is devoted to the text, and the other to the plates, an arrangment by which the reader is saved the tediousness of turning back to refer to the plates, which must always occur when both are bound together.

Homeopathy: An Examination of its Doctrines and Evidences. By Worthington Hooker, M. D. pp. 146. New York, Charles Schribner, 1851.

Those of our readers, who are familiar with the British journals of medicine, must have doubtless been struck with the attention which has lately been bestowed in this quarter on homeopathy. The apostacy of one or two individuals, occupying prominent positions in the British medical world, has probably been the immediate stimulus of the interest thus displayed. But the fact is manifest, that our brethren in the British islands are disposed now to deal with the charlatanism in question, as an antagonist which must be seriously and efficiently met. We confess that we have viewed this movement with much satisfaction. has long been our impression, that the contemptuous indifference with which the progress of the humbug has been generally treated by the profession, particularly with us, has been bad poli-That it has taken a hold upon a portion of the educated and refined classes of society, cannot be denied. And absurd as we deem its doctrines and pretensions, they have rallied partisans whom it is worth while to convince, or at least expose. It is, therefore, with especial cordiality, that we welcome Dr. Hooker's admirable little brochure on this subject.

Dr. Hooker is so well known to the profession as one of our ablest and most judicious politico-ethical writers, that any thing from his pen must at once commend itself to general interest and

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attention. The essay before us is "the Fiske Fund Prize Dissertation of the Rhode Island Medical Society," on the subject, "Homœopathy, so called, its history, and refutation." And we may say of it, most unreservedly, that it places our profession under the strongest obligations to the accomplished author. In style, force, and temper, it is truly excellent, and must, we feel, do much good.

Dr. Hooker's examination of homœopathy, crushing as it is in analysis and argument, is, we think, particularly likely to prove useful, from its great fairness and moderation of tone. The author professes to have "no desire to search out its weak points and leave untouched its strong ones, if there be any, but to be willing to meet it at every point." And this is certainly the right way to obtain a hearing among the intelligent and candid, who have adopted the system of Hahnemann, "without a real understanding of its merits." Those who will give Dr. Hooker a hearing, it may be safely asserted, "will be induced to abandon the combination of falsities and inconsistences which this system presents."

In concluding this notice, we ask the attention of our readers to the following remarks in relation to medical fallacies in general:

"Medical delusions, generally, though so diversified in their forms, have a strong family resemblance, and the fallacies of Homœopathy may be considered as the types of other fallacies. An exposition of them, therefore, will reveal to the reader the foundations of other delusions and forms of quackery, and will perhaps enable him so to apply the principles of evidence in medicine, that he may in future the more readily detect error, whether it appear in the garb of learning or of ignorance.

A refutation merely of Homœopathy, without regard to other delusions, or to the general sources of error, would be a comparatively trivial, and almost useless effort. If it should be successful in dislodging this boasted system from its hold upon the popular belief and favor, some other fallacious system would take its place. And if left to itself, it would in a little time pass away, like all other delusions before it. In attacking Homœopathy therefore, we must look beyond this delusion, and aim at an exposure of the common sources of error, if we wish to produce any valuable and permanent effect."

A Memoir of Samuel George Morton, M. D. By Charles D. Meigs, M. D., Read before the Academy of Natural Sciences, November 6th, 1851.

This elegant biography will be read with the deepest interest by the wide circle of the friends and admirers of Dr. Morton. It is in Dr. Meigs' happiest style, abounding in the genial earnestness and graceful bonhommie, which are so well known as his characteristics, and no less distinguished by erudition, tact, and right feeling. We should take the occasion to extract at length from it, but for the extended notice of Dr. Morton, which appeared in the number of this Journal for June last.

A Review of Materia Medica, for the use of Students. By John B. Biddle, M. D., formerly Professor of Materia Medica in the Franklin Medical College of Philadelphia, &c. &c. pp. 322. With Illustrations. Philadelphia: Lindsay & Blakiston: 1852.

This little volume is intended as a manual of Materia Medica for the use of Students. There is, perhaps, no branch of medicine in which the absence of elementary text-books, of convenient size, adapted to the subject as taught in our medical schools, has been more felt than in this; and the author has been induced to hope "that a condensed review of the elements of Materia Medica may be found useful, as a guide to the courses of lectures delivered on this department in the United States." The work "makes no pretensions to rank among original treatises, but is designed to present the leading facts and principles usually comprised under this head, as set forth by the standard authorities."—(Preface, page 3.)

THE MEDICAL EXAMINER.

PHILADELPHIA, FEBRUARY, 1852.

OBITUARY.

Died, on the 21st ult., at his late residence on the Brandywine, Delaware, Thomas Mackie Smith, M. D., aged 42 years, the brother and preceptor of one of the Editors of this Journal.

Few men live who possessed more of the confidence and affection of their fellow citizens, and better deserved these, than the lamented subject of this notice. In the midst of a scattered population, he fulfilled the duties of his arduous profession, with untiring assiduity, and unswerving faithfulness; and by many years of devoted service and the kindest attentions, secured not only high admiration for his medical skill, but the warmest love and gratitude from all who received the benefit of his labors, or were made acquainted with his uniform self-denial and perseverance. A whole community, among whom he has gone in and out, relieving the sick, supplying the wants of the destitute, comforting the afflicted, and showing kindness to all, now rise up and call him blessed, and thus show how well he deserved that title, which belongs to so many of his profession—"the beloved physician."

SYDENHAM SOCIETY OF LONDON.

The first volume of the Society's works for the year 1851-'2, has reached this country. It embraces the "Principles of Physiology" of Unzer; and a "Dissertation on the Functions of the Nervous System," by Prochaska; translated and edited by Dr. Thomas Laycock. It is hoped, that another volume of the Annals of Influenza has appeared by this time in London. The third volume is in press, the fourth of Rokitansky.

INSTRUCTION IN MICROSCOPY.

Our readers will find in the advertising sheet, the announcement of a course of lectures and demonstrations on the above subject, by Dr. John Neill, Demonstrator of Anatomy in the University of Pennsylvania.

To those desirous of pursuing this most interesting department of Medical Science, we can confidently recommend Dr. Neill as in every respect competent to teach it. It will be seen that the number of the class is limited to twelve.

MEDICAL NEWS.

HOMEOPATHY.—A full meeting of the Edinburgh Medico-Chirurgical Society was held on the 19th November, no less than sixty-four members being present. After the transaction of routine business, the following interesting circumstances occurred:—

Professor Syme, in moving "That the public profession of homeopathy shall be held to disqualify for being admitted or remaining a member of the Medico-Chirurgical Society," said,—that in addressing the Society on this occasion, he considered it to be quite unnecessary to enter into a formal refutation of the principles of homeopathy, but before proceeding further, he would exculpate himself from the charge of inconsistency brought against him by Dr. Henderson, to the effect that he had himself countenanced homeopathy in two instances. This charge appeared at the time in the various medical periodicals. Now, regarding this inconsistency as tantamount to a practical falsehood, he (Mr. Syme) took the present opportunity of exhibiting the falsities of the accusation. The cases to which Dr. Henderson alludes are two in number. The fact is, there was a young man who had been under the care of Dr. Nimmo, who had been placed under his (Mr. Syme's) care. Finding that he had been attended by Dr. Henderson, Mr. Syme requested a meeting, not for the purpose of consultation, but to arrange for placing the medical treatment under the hands of another physician-Dr. John Taylor-as Mr. Syme felt that he could not co-operate with Dr. Henderson. In the second case, he met Dr. Henderson, being under no pledge not to do so. This is the whole extent of his countenance of homœopathy. Mr. Syme next stated what he conceived to be the duty of every member of the Profession. As an individual, he had long refused to adopt homeopathy, because he regarded it as mischievous folly. As a member of a licensing board, he would not refuse any candidate who complied with the regulations of the University. If such an one were base enough to disguise his real sentiments in regard to the practice of physic, the disgrace would rest with him and not with the Board. The duty of a Society like the present was, he said, clear. It was a voluntary Association for upholding sound principles of practice, and for elevating professional character. If, therefore, a member departed from the principles of the Society, and placed himself in opposition to them, he should be requested to withdraw from their body; or, if seeking admission, he should be excluded. He trusted the motion would be unanimously adopted.

Professor Simpson seconded Mr. Syme's motion, and alike also defended himself from the charge of meeting homocopaths in consultation, which emanated from the same quarter. Dr. Henderson affirmed that Dr. Simpson had met him in consultation on some cases; Dr. S., therefore, called upon Dr. Henderson to ask what these cases were. It so happened that Dr. Simpson had anxiously attended Dr. Henderson's own wife; but she, with her husband's sanction, was treated on the ordinary principles of scientific medicine, and not homocopathy. In doing this, no one would accuse Dr. Simpson of countenancing homeopathy. Dr. Henderson, however, mentioned two cases,—one of uterine disease, and the other of disease of the labium. Dr. Henderson had, it is true, previously attended them, and had asked Dr. Simpson to take charge of them, but he did not attend them with, or for, Dr. Henderson. In one other case he certainly did meet Dr. Henderson at the bed-side, but this was a case involving an operation, and not internal treatment; but even in doing this much, Professor Simpson was now convinced he acted wrongly; he had erred in going thus far. However, even if Dr. Henderson's statements had been true to a far greater extent, it only proved, that hitherto the Profession had been over-indulgent to him and his heresy, believing, as his friends did, that the delusion would soon subside. But, because they had been over-tolerant, it was no reason why they should continue so. It now became the duty of the Society to make their stand, feeling that every proper consideration for themselves and the noble science they cultivate, calls imperatively for a complete casting off of homeopathic practitioners, as abettors of delusions and errors. Dr. Simpson continued to draw a parallel between these impostors and the brothers in another profession—Joe Smith and the Mormons. These two heresies, the homoeopathic and the Mormonite, had in fact many points in common, and even both equally absurd. Some homocopaths profess Hahnemann to have been despised, [Witness the ravings of the clerical witling quoted by Dr. Cormack.—Ed. P. J.] as the Mormonites do of Joe Smith. It is true, we have no standard of faith whereby to test medical opinion, but we have the standard of common sense. Judged by this, Hahnemann's dogmas are a tissue of the strangest contradictions and the wildest absurdities. If a grown up man were seriously to say that two and two make five, he would not be considered sane, as he defies the dictates of common sense. When other grown up men tell the world, that they can cure this or that disease by the billionth or decillionth of a grain of a drug, they express an opinion more palpably absurd than that of him who says two and two make five. If men would reflect what a billion or a decillion really is, they would not be so childishly

credulous. There is no poison so strong that a billionth of a grain would in the least affect a fly, much less a human being. These people tell us, that division of their drugs invests them with "tremendous" power, but one of these "tremendous" billionths will not affect the frailest insect. For what is a billionth of a grain? Why, if a grain of sulphur were divided into billionths, and our first parent, Adam, had, when living, (6,000 years ago,) swallowed one such billionth every second until the present time, supposing he had lived so long, he would not yet have swallowed half the grain. He must work on at the rate of sixty billionths minute for 24,000 years to come to get through the entire grain. Yet, forsooth, these wiseacres believe that a few of these billionths will cure an attack of jaundice. Appealing to common sense, should not such men be requested to withdraw from scientific societies like the present? However, a billionth of a grain is a large dose; some give the tenth dilution or the decillionth of a grain. Little do they reckon what a decillion is. Here is its notation: -1,000,000,000,000,000,000,000,000contains nine hundred millions of human beings. If all these nine hundred had lived from the commencement of the world, and each had swallowed every second of their existence a decillionth of a grain, they would not yet have finished the grain. And, say the homœopaths, a few of these decillionth globules of belladonna will cure scarlet fever. One remark of Mr. Syme reminded Dr. Simpson of a curious fact in the early history of homeopathy in Edinburgh, proving on the one hand how far imagination will go, on the other hand, that all homoeopathic globules are alike, or rather alike inactive. Some eight years ago Dr. Simpson received a present of a box of homocopathic medicines from an old schoolfellow, who had set up as a homeopathic druggist. During the time it was in Dr. Simpson's possession it was given as a plaything to his son, then a child. The boy amused himself by uncorking the bottles, emptying their contents into a general heap, and then refilling them promiscuously. The effect of this was a complete compounding of the globules of different kinds, by mixing them together. It soon happened that a professional brother calling at Dr. Simpson's took a fancy to the box and carried it Many weeks after, the new proprietor of the box met Dr. Simpson, and told him he had been trying homeopathy with the contents of his box, and that he had accomplished wonderful cures. Dr. Simpson enjoyed the joke, and said nothing about the box, until, finding his friend had got deep into the homœopathic mine, and actually published a list of cases, he at length told him of the elaborate mixture the globules had

undergone. This friend is Dr. Henderson!!! In conclusion, Dr. Simpson alluded to those impostors, who, pretending to be homeopathists, prescribed ordinary doses in the guise of globules, and practised either way, as best suited their own pockets and the caprices of the patient. These, he argued, should be expelled from the Society.

At the conclusion of this instructive as well as important meeting, the globulists, Drs. Rutherford, Russell, and James Russell, had the good sense to anticipate expulsion by resigning their seats as members of the

Society.—Provincial Medical and Surgical Journal.

OBITUARY.—We are pained to record the death of Dr. James Cameron, one of the oldest and most reputable practitioners of our city. There are few among us who have acquired a more extensive practice, or enjoyed a higher degree of the confidence and affections of his patients, which he retained during a long life. Dr. C. was a native of Scotland, a graduate of Glasgow, and a worthy member of the New York Academy of Medicine. He was deservedly respected, and his loss will be deplored, for he was an honest man.—N. Y. Med. Gaz.

Dr. Sydney A. Doane, Health Officer, at Quarantine, Staten Island, New York, died of ship-fever, on the 27th of January.

Dr. James Arthur, one of the most distinguished medical officers in the British service, died lately in Cheltenham, England, at the age of seventy.

THE ROYAL SOCIETY OF ENGLAND.—The anniversary meeting was held on Monday, the Earl of Rosse, president, in the chair. His lordship delivered his annual address, after which the Copley medal was presented to Professor Owen for his important discoveries in comparative anatomy and palæontology, published in the Philosophical Transactions; one of the royal medals to the Earl of Rosse for his observations on the nebulæ and the second royal medal to Mr. G. Newport for his paper on the Impregnation of the Ovum. The Society then proceeded to the election of council and officers for the ensuing year, and the following noblemen and gentlemen were elected :- President, the Earl of Rosse, K. P., M. A. Treasurer, Lieutenant Colonel Edward Sabine, R. A. Secretaries, Mr. Samuel Hunter Christie, M. A., and Mr. Thomas Bell. Foreign Secretary, Captain W. H. Smith, R. N. Other Members of the Council, Mr. William Bowman, Mr. Benjamin Collins Brodie, Mr. Charles Brooke, the Rev. Professor Challis, M. A., William Clarke, M. D., Charles Bridle Daubeny, M. D., Sir P. de Malpas Grey Egerton, Bart., the very

Rev. the Dean of Ely, Mr. J. P. Gassiot, Marshall Hall, M. D., Sir John Frederick W. Herschel, Bart., Professor W. Hallows Miller, M. A., Lieutenant Colonel Portlock, R. E., Mr. Edward Solly, Mr. William Spence, Nathaniel Wallich, M. D.—London Lancet.

THE LONDON EPIDEMIOLOGICAL SOCIETY .- On the formation of this Society, application was made by the President, Dr. Babington, to various public bodies for their assistance and co-operation; the fruit of this judicious step is now being realized. The Committee on small-pox and vaccination have deputed two of their members to examine the returns annually made by the medical officers appointed by the various boards of guardians according to the requirement of the Act of Parliament, passed in 1840, "to extend the practice of vaccination." Through the courtesy of the Poor-law Board, every facility for the full examination of these returns has been afforded; and we are informed by the honorary secretaries of the Society, that a large body of the most valuable and elucidative information has by these means been obtained by the deputa-Our readers will be enabled to judge of the importance of these official documents, when we state that they show the total number of persons vaccinated yearly by the public vaccinators in each district of the 631 poor-law unions in England and Wales; giving in separate columns those who are under one year, and those above one year of age, and likewise distinguishing in most instances the successful from the unsuccessful vaccinations, under and above one year. As the number of births in each union is also appended, a certain basis is afforded for determining the exact progress of vaccination in every part of England and Wales, so far as the gratuitous system is concerned. The results are now under the consideration of the gentlemen who have gone over the returns; and although it would be premature at the present moment to state the conclusions to which they point, we may affirm that they promise to constitute one of the most trustworthy contributions hitherto made in this country to the statistics of vaccination.

ARSENICAL POISONING.—A very interesting case has recently come before the French Tribunals, in which the question arose, as to the possible contamination of a corpse buried in an arseniferous soil. M. Barse, who was ultimately consulted, appears to have shown more than ordinary toxicological acumen. (Union Médicale, Sept. 1851.)

A man and his wife were accused, the one of poisoning his former wife, the other her former husband. Both coffins, buried in different cemeteries, were exhumed. The female was in good preservation, the

coffin being intact; the male less so, the coffin being much decayed, and earth being found within it. Arsenic was found in both bodies, but the surrounding earth in both cemeteries was found to contain arsenic also. The chemists were puzzled, but, from the fact that in the coffin of the female no arsenic could be detected in the cerements or other matters interposed between the corpse and the earth, they construded that it was a case of poisoning.

cluded that it was a case of poisoning.

M. Barse being appealed to, decided that this was the correct opinion, as the native arsenic in the soil was always mixed with iron, cobalt, or antimony, and could not be detected by ordinary reagents. Its solubility would also prevent its reaching the bodies by filtration. To confirm this view, he likewise examined other bodies buried in the vicinity of the two in question, but no arsenic could be detected. He further searched the chamber in which the man died, and finding splashes on the walls and on the floors, which indicated the vomitings of the patient, had the spots scraped carefully, as also other parts of the room, distant from the bed. The former matters contained arsenic, the latter none. The parties, on this, were found guilty.

DEATH OF PRIESSNITZ.—Priessnitz, the founder of hydropathy, died at Graefenberg on the 26th of November, at the age of fifty-two. In the morning of that day Priessnitz was up and stirring at an early hour, but complained of the cold, and had wood brought in to make a large fire. His friends had for some time believed him to be suffering from dropsy of the chest, and at their earnest entreaty, he consented to take a little medicine, exclaiming all the while, "It is of no use." He would see no physician, but remained to the last true to his faith. About 4 o'clock in the afternoon of the 26th, he asked to be carried to bed, and upon being laid down he expired.

THE FRENCH REVOLUTION.—On Friday, the 5th inst., Dr. Puriss, of the Rue-de-la-Paix, was mortally wounded in the Rue Faubourg Poissoniere, during his professional visits. He received two musket shots, and died in two hours afterwards. In the same room where he was lying, there were also thirty-five dead bodies.

The London Medical Times and London Medical Gazette have been incorporated, and the joint publication has been issued from the commencement of the current year, under the title of the Medical Times and Gazette.

Annual Public Meeting of the Academy of Medicine of Paris. -The Academy held its annual meeting on December the 16th, 1851. A general report was read as usual on the prizes awarded by the Academy in 1851. The subjects of the prizes for 1852 and 1853, were then made known, and M. Dubois (d'Amiens) read a panegyric discourse on Hallé. The prize of the Academy on White Swelling, was awarded to M. Richet, well known for his successful labors on the subject. Madame de Civrieux's prize on Convulsions was not awarded to any of the competitors. A prize on Melancholia only produced an encouragement. Among the subjects for 1853, we notice the following:-" Is there any Paraplegia independent of Myelitis?" The subject of Portal's prize is, "The Anatomy and Physiology of the various kinds of Goitre." Madame de Civrieux's, "The History of Tetanus." Dr. Capuron's, "On the Physiological and Pathological Circumstances of the Puerperal State." The Argenteuil prize, on "The Therapeutics of Stricture," has now accumulated to 4801.; it is an hexennial prize, and was not awarded from 1838 to 1844. The Academy prize for 1852 is, "On Ergot of Rye as regards Physiology, Midwifery, and Hygiene." Portal's for 1852, "On the Pathological Anatomy of the Inflammation of Bone;" and Madame de Civrieux's, for the same year, "The Ætiology of Epilepsy: inquire for the indications which the study of its causes may furnish in regard to the preventive or curative treatment of the disease."-Lon. Lancet.

RECORD OF MEDICAL SCIENCE.

SURGERY.

Gonorrhæa. Dr. C. B. GIBSON, (Medical Society of Virginia, November meeting,) made some remarks on the treatment of Gonorrhæa, and exhibited an instrument which he learned was in common use in New York, and which he thought would be found useful in cases where it was desirable to apply caustic solution to every part of the urethra. The instrument consists of a silver tube, containing a sliding wire, which is rolled at its end with fine sponge. The sponge may be saturated with any solution, and made to swab out the urethra and touch its entire wall. The instrument was introduced, he believed, by Dr. Campbell Stuart of New York, and he learned that it was very popular.

Dr. Gooch said that the instrument could be obtained from several of the druggists of the city, but that he did not like its construction nor its use. Since the subject was brought up, he would take the occasion to remark, that, having experienced great difficulty in the treatment of this vol. xv.

opprobrium of surgery, as Dr. Gibson had justly called gonorrhea, he had lately given a fair trial to the hydrastis canadensis in five cases. He was sorry to report, however, that he had failed in accomplishing any good whatever with it. It is an astringent, but has no peculiar virtues, he thought. He was induced to make a trial of it many months ago, by the recommendation of a member of the society, who knew it as an old Philadelphia remedy. Just now, however, almost every medical journal in the United States is copying a short article by Dr. McCann of Ohio, in which he lays claim to originality in its use in this disease. He thought the claim as absurd as the specific.—Stethoscope.

MATERIA MEDICA AND THERAPEUTICS.

Comparative Value of Cod-liver Oil and Fish Oil mixed with Iodine.—Dr. Champouillon, professor at the Army Medical School of Val de Grace, has just laid before the Academy of Medicine the result of the comparative experiments he has made upon phthisical patients with cod-liver oil, and simple fish oil mixed with iodine. Dr. Champouillon gave the cod-liver oil to 120 patients laboring under phthisis. Fifty-one were in the first stage; and of these, twenty-four were benefitted, and none died. Thirty-seven were in the second stage; of these, nine recovered, and three died. Fourteen were in the third stage; and here six recoveries and four deaths took place. The author gave the iodated oil to seventy-five patients in different stages of phthisis: no improvement took place in any case, and in several it was noticed that the remedy did harm.—Lancet.

Extraction of Balsam of Peru.—It appears that there is an error in the account given in the works on Materia Medica, of the mode of preparing Balsamum Peruvianum (Balsam of Peru,) in Central America. In the last edition of the U.S. Dispensatory, the following description of the process is furnished: "Incisions are made into the bark, which is slightly burned, so as to cause the juice to flow. Cotton or woollen rags are then inserted into the apertures, and after saturation, are removed and replaced by others. When a sufficient quantity is collected, the rags are boiled in water in large jars; and the balsam rising to the surface, is skimmed off, and put in calabashes or bladders." The balsam, however, has a specific gravity of from 1.50 to 1.60, and cannot therefore, float in the water by boiling. This mistake was lately pointed out to Dr. Pereira, (who had adopted the erroneous description,) by Dr. Martius, of Erlangen; and Dr. Pereira, admitting the mis-statement, publishes in the London Pharmaceutical Journal, for November, 1851, the following paper on the mode of producing the balsam, furnished him, by a gentleman from South America, who obtained it "on the dictation of a native Indian."

"The manner used to extract the balsam from the trees, is to make several incisions in the tree, over which they place pieces of old cloth or rags, which absorb the juice, which, when they observe to be well soaked, they put in water to boil, until the rags have discharged the greatest part of the balsam which they had imbibed. They allow it to settle sufficiently until the water rises, leaving the balsam at the bottom; they pour off with care the water, afterwards filling 'tecomates' (gourds,) with the balsam, although it is not now very pure. The rags are then put into 'redes' (little bags of cord,) which, when strongly twisted, wring any remaining balsam out of them into the 'tecomates.' When we purchase it, it is necessary to clean it again, because it still contains water and other impurities, which some Indians will mix with it to gain greater weight."

Indine rendered soluble by Syrup of Orange-peel and Tannin.—M. Debauque mentions, in the Journal de Pharmacie of Antwerp, that he has found means of keeping iodine in a state of solution, when added to mixtures in the form of tincture. The author uses for that purpose, syrup of orange-peel, which answers the purpose perfectly. It was suspected that tannin was mainly instrumental in this result; and this was rendered evident by putting a few grains of tannin into a quantity of water to which tincture of iodine has been added, and in which the iodine had of course been precipitated. The addition of the tannin caused the iodine to be immediately re-dissolved. Thus will the syrup of orange-peel be advantageously added to mixtures containing tincture of iodine, and tannin to injections composed of water and the same tincture.—Lancet.

"Use of Tannate of Alumina.—Mr. Harrison had found the local exhibition of the remedy in question followed by the most satisfactory results. The method of using was to throw into the passage an injection containing from 2 to 10 grains of the salt dissolved in distilled water, the strength of the solution being in a great measure determined by the amount of smarting pain produced. The most advisable method was just to keep the strength of the injection up to the smarting point. He thought it injurious to produce more than a gentle scalding.

Mr. Harrison did not anticipate, of course, equal success in every case, but he generally found the disordered condition of the urethral mucous membrane removed in the course of one or two weeks, in the ordinary run of cases.

On his recommendation, some of his professional friends had employed it in their practice, and from their reports he was supported in his high opinion of the remedial properties of the tannate of alumina. The combination of alumina and tannic acid produced by Mr. Rogers Harrison, was of a dirty yellowish color, and in crystals about the size of those of coarse sugar, and readily soluble in hot water.—Lon. Med. Gaz.

PATHOLOGY AND PRACTICE OF MEDICINE.

Prurigo of the Genital and Anal Regions.—Various remedies are from time to time recommendeded in the journals for this disagreeable and obstinate affection. The London Lancet, for December 15th, gives an application of M. Tournié's, as having been used with much success. "The affected spot is to be rubbed twice a day with calomel ointment, (one to two drachms of calomel to ounce of axunge), and, after each application, dredged with a powder, consisting of four parts of starch to one of powdered camphor." We have used a great variety of applications, for the relief of this unmanageable affection, and have derived most advantage from a cerate made of calomel (3i), in Goulard's cerate (3i.)

Hydatids of the Liver Evacuated Externally.—By M. LAFFORGUE.-A young female, after running rapidly down a hill, was seized with acute pain in the right hypochondrium. The ordinary signs of diseased liver soon supervened, and, notwithstanding the most varied modes of treatment, continued for five years. Her relations, believing that marriage would improve her condition, permitted her, in opposition to the advice of her physicians, to take a husband. The symptoms continued, though the disease did not appear to make progress. Six months after marriage she became pregnant. The symptoms now underwent exacerbation, but were soon mitigated, and the pregnancy advanced to the full The labor was natural, and the patient even nursed her child successfully. Finally, after the lapse of a year, her condition became more alarming, and M. Lafforgue was sent for. She was then in the following state:—Extreme emaciation, general blanching, excessive feebleness, impossibility of retaining food, which was rejected by vomiting almost as soon as swallowed, considerable tumefaction of right hypochondrium, descending to the crest of the ilium and transgressing the linea alba, obstructed respiration, orthopnœa. The respiration soon became more and more embarrassed, threatened with immediate asphyxia, the patient uttered stifled cries, demanded air, and seemed at the point of death. Lafforgue, detecting fluctuation in the tumor which compressed the lungs, made with the bistoury, between the eighth and ninth ribs, an opening which permitted the escape of a flood of thick serum. But the incision soon becoming obliterated by the presence of a thick granular matter, it became necessary to enlarge it, and immediately a hydatid, as large as a The discharge was then re-established, bringing pear, was evacuated. along with it hydatid sacs, of various sizes, some full, others completely empty, and with obliterated cavities; those which were so large as to stick in the wound were drawn out with forceps. In the space of a few minutes a vase, capable of holding six pounds of fluid, was filled with hydatids, and with a yellowish serosity of so fetid an odor as to annoy all the assistants.

The patient, after this enormous evacuation, fell into a state of ex-

treme feebleness, the discharge was consequently arrested for the moment. Next day, however, uneasiness and dyspnæa were renewed, the bandage was removed, and a considerable additional quantity of hydatids and of fluid was evacuated. For six days the discharge continued spontaneously, and such was its abundance that it was estimated at twelve to fourteen pounds of fluid, containing several hundred hydatids. Gradually the symptoms disappeared, hydatids ceased to issue from the wound, and the fistula had nearly cicatrised, when the supervention of pains and uneasiness seemed to threaten a relapse. It proved, however, to be a second pregnancy, which led (by the pressure of the uterus) to the complete cicatrisation of the wound.—Edinburgh Journal, from Journ. de Médecine et de Chirurgie Pratiques.

Case of Paraplegia Successfully Treated by the Ergot of Rye.—Dr. Gerard, chief physician of the Hotel Dieu, of Marseilles, has published in the "Bulletin de Therapeutique," three cases, where from ten to forty grains of the ergot of rye have cured paraplegia of the inferior extremities. In the first case the paraplegia had lasted four years, in a man of thirty-nine; the ergot was administered in the dose of ten grains per diem, and gradually increased to forty. In three months the man was quite well. The second case refers to a man of twenty-nine, whose affection was caused by intemperance; he was cured in two months by the same means. The third patient, aged twenty-three, had suffered both from paraplegia and anæsthesia after having been much exposed to dampness in Algeria. The cure by the ergot was effected in three months.—Ibid.

Phosphorus in Beriberi and other diseases. By W. G. MAXWELL, Esq., M. D., Garrison Surgeon, East Indies.—I have for several years past been trying phosphorus in beriberi, more especially in the early stages of that disease, before organic derangement sets in, and before

the rapidly increasing anasarca has advanced too far.

I give the phosphorus in substance, in one, two, three, or more grains at a dose, morning or evening, or oftener, according to the urgency of the symptoms. I make the phosphorus in pills, bruising two grains or more, and then enclosing it in a wafer of dough or crumb of bread. In acute cases I make the pills fresh up at the time; but small pills, made up carefully in this way, will keep for some time. I increase or diminish the dose, as the symptoms become milder or the reverse; the urine flowing in increased quantity is the sign.

In giving the pill I make the patient keep a mouthful of water in his mouth, and the pill being dropped into it, the whole is swallowed at once. When there is want of sleep, and the bowels not fairly open, a full anodyne, with carminative tincture, together with a full purgative, all combined, are given along with the pill of phosphorus. When the motions become luminous the phosphorus can be reduced in quantity. The earlier in the disease the phosphorus is given, the more evident is

action. If any tenderness of the peritoneum has set in, the phosphorus of course cannot be expected to act.

In recent cases of beriberi in young subjects, I have seen the urine increased from a few ounces to thirty pounds in the twenty-four hours after the use of phosphorus. The ædema leaves the cheeks and neck. In twenty-four hours the line can be seen across the sternum, and the patient even says he feels as if a band had been removed from his neck, and he points to the line of relief, which can be traced by the eye. These were young subjects,—eighteen to twenty-five,—and the full dose

In beriberi the motions are of an excessively green color, exactly like those passed in severe cases of recovery from cholera. It is long since I have considered beriberi and ague allied, and longer still since I could trace a relationship between ague and cholera; and if true, which I have in my works endeavored to show, the conclusion to be drawn is, that cholera and beriberi are also closely allied.—Lancet.

Tying of the Carotid Artery, followed by Softening of the Brain, and Death.—The carotid artery has now been tied several times, with perfect success, both in this country and on the continent; but when deligation of that artery for ancurism has been followed by sudden softening of the brain and a fatal issue, the circumstance should always be recorded. Dr. Chopel, a hospital surgeon of St. Malo, in France, lately brought such a case before the Academy of Medicine of Paris. From pressure of the aneurismal tumor, severe pain was experienced by the patient, and Dr. Chopel preferred the ligature to electro-puncture, which latter operation he deprecates very warmly. The author suspects that a tendency to softening or complete ramollissement existed before the operation, although no striking symptoms of such pathological change existed. The patient died a few days after the deligation of the artery, with all the symptoms of softening of the brain.—Lancet.

Diet in Protracted Fevers. By E. B. HASKINS, M. D .- It is well known to our readers, who have at all kept pace with the advancement of chemico-physiology, that, in the food of man, there are two great classes of alimentary substances, to subserve the wants of the ever changing organism—the nitrogeneous and non-nitrogeneous. The former being destined for the nourishment of the tissues, whilst the latter subserves, mostly, the purpose, by slow combustion, of the generation of animal It is not denied that, in the process of disintegration, or wasting of the tissues, some heat is evolved, also, that some fat enters into the composition of those tissues, whilst other portions seem necessary to give symmetry to the body and form cushions of support to moveable parts; yet the above classification of alimentary substances, based upon their uses, is regarded mainly as true. It may also be remarked, that that portion of the non-azotized substances, not directly burned off in the circulation, is converted into fat, and deposited in the adipose tissues for future use.

This economical disposition of respirable materials, is beautifully illustrated in the habits of hybernating mammalia—that go into their winter retreats loaded with fat, and come out in the spring comparatively lean. As such animals remain physically inactive during the season of hybernation, of course but little waste of muscular or other vital structures takes place—not more than can readily be supplied by the proteinaceous compounds already in the vascular system.

Now, when a subject enjoying ordinary health is seized with continued fever, but little or no food is required for a number of days; the blood being charged with azotized matter sufficient to supply the waste from tissual disintegration, whilst, in the adipose cells, there is already fat

enough for respiratory purposes.

But should the disease continue unchecked, the time arises when food becomes imperative—when the limbs become lean and emaciated, and prostration of strength supervenes. All agree as to the time for the more prompt and regular administration of food; but the kind of food best suited for this stage seems not to have met with so general an agreement.—The diet usually prescribed in such cases is animalized waters, as beef tea, chicken water, &c., and the manner of preparing them is to remove all of the fat as it rises to the surface in the process of boiling. So the patient, it is perceived, ingests nothing but azotized food.

Now what, à priori, will be the course of a protracted fever under such a dietetic system? It is clear—the adipose tissue being exhausted of its moveable fat, and no starch, gum, sugar, or other combustible material being furnished to the blood, the oxygen of the inspired air seizes upon the tissues, and the brain, being, perhaps, the most oxidizable, is the most energetically attacked; and as fatty matter enters largely into its composition, no adequate reparation can take place; hence delirium, subsultus tendinum, wakefulness, and other morbid cerebrospinal activity—phenomena too often witnessed at the bedside, and always portend an unfavorable issue.

This hypothetical view of the pathology of the brain is, in some degree, supported by the fact that post-mortem examinations have failed to detect any constant lesion in that organ; and when congestion or inflammation has been found, it is not violent to presume that it came on

as a secondary lesion.

The point in the dietary of protracted fevers, to which I wish to direct attention, is already clear to your mind—that non-nitrogenized substances, as starch, gum, sugar, &c., should be freely administered, instead of the exclusively nitrogenized diet. By thus furnishing respirable materials, the tissues, particularly the brain, are protected from the destructive influences of the inspired oxygen. These materials, then, are far more essential to the organism, under such circumstances, than the azotized substances, since, whilst the muscular system is comparatively at rest, the histological elements undergo very slow disintegration, as is exemplified in hybernating animals.

The non-azotized alimentary substances, as is well known, can be rendered as palatable and inoffensive to the sick (oils excepted) as can the nitrogenized. Sweetened gum water, arrowroot-jelly, barley water, and even the gruel of Indian meal are quite palatable and unirritating to the most delicate stomach. To secure, however, all of the possible dietetic wants of the system, they may be alternated with the nitrogenized diet.

In conclusion, I will take occasion to remark, that, in determining a course of practice upon theoretical grounds, great caution is necessary, that we commit no extravagances. We should never, from a priori reasoning alone, abandon well-established therapeutic usage. The most that may be ventured upon with impunity, is the modification and correction of unenlightened experience, and the furnishing materials for such blanks as observation has failed to fill up. Ratiocination is too uncertain a guide to be wholly trusted to in the prosecution of an art like therapeutics, based upon progressive science. Kept within these restricted bounds, reason performs her legitimate office in the advancement of a profession that can never be purely empirical or rational.—

Nashville Journal of Med. and Surg., Dec. 1851.

Sesquicarbonate of Ammonia in Lepra and Psoriasis.—M. CAZENAVE, so well known as a very successful dermatologist, has just published experiments tending to show that sesquicarbonate of ammonia may advantageously be used as a succedaneum of arsenical preparations, in lepra and psoriasis. The salt is mixed in the following proportions:—Half a drachm of sesquicarbonate of ammonia; diaphoretic syrup, seven ounces; take from one to three tablespoonfuls per diem. The physiological effects are very slight, but in the space of about a week the scales begin to fall off; those which succeed are thinner, the patches which give them support gradually fall in, the redness fades after a longer or shorter time, and a lasting cure generally ensues. If diarrhoea, lassitude, cephalalgia, quick pulse, and rapid alternations of heat and cold, were to occur, as was the case with two or three patients, the remedy should be suspended.—London Lancet.

ANATOMY AND PHYSIOLOGY.

Muscular Contraction—Cadaveric Rigidity—French and American Experiments, &c.—It appears that the Savans of Paris have been very recently engaged in physiological experiments upon muscular contractility, and cadaveric rigidity, and they seem considerably elated, if not dazzled, by the new coruscations of light which these researches are supposed to shed in the realms of physiology. Whether this be, as it claims to be, a new burst of light, we will inquire into presently. In the meantime we propose to give a translation from a French Journal, narrating these discoveries, as reported by M. Leon Fourcault, on behalf of M. Brown-Sequard, as follows:

According to the opinion generally received, post mortem rigidity, which takes possession of the cadaver some time after the last breath, is

wholly due to the mechanical effect of the coagulation of the blood in the animal tissues. The reasons given, have, at least, considerable plausibility. Among those individuals suddenly struck dead, whose blood preserves its natural elasticity, rigidity of the muscles manifests itself with great force, whilst it is scarcely seen in those who die after protracted diseases, or after copious hæmorrhages,* and still less among those who die asphyxiated by deleterious gases, the specific action of which prevents the coagulation of the blood. This contraction of the muscular system always disappears in advance of decided putrefaction, which destroys the organism, and subjects it to the reign of inanimate matter.

Hence we are readily induced to admit two kinds of death: the one, general, which supervenes first, at the moment when the heart ceases to beat, and which is in some sort only a displacement among the organic wheels of life, the intimate and harmonious action of which constitutes the unity of superior beings; the other variety of death supervenes subsequently in each individual wheel of the organism, as the consequence of the primary variety. Thus the general life may be abolished with the existence of the feeling or sentient unity, while, nevertheless, each organ preserves, during a time, a life of its own, after life proper, the persistence of which sustains itself above, and for some moments contends against the reign of inorganic matter. To this last phase of life cadaveric rigidity belongs, which, so far from being considered as the result of a purely mechanical action, bearing testimony to confirmed death, is, on the contrary, the last manifestation of muscular activity; at the moment of actual death, the muscular functions act for the last time, without guidance or aim, until the vital principle is completely exhausted.

The system of experiment to which M. Brown-Sequard boldly (audacieusement,) submits the living organism, seems to us to have been dictated by analogous considerations to those we have enumerated, and the results which he has obtained, favor the opinion that cadaveric

rigidity is but life manifested in its utmost or last limits.

Having at first incidentally observed that the parts affected with this post mortem rigidity, (the assumed evidence of death,) may, under the influence of sanguineous injections, become again supple, and give signs of irritability, M. Brown-Sequard entertained this particular question, and, on varying his experiments, has arrived at the results which we are about to copy from him: In the dead bodies of rabbits and guineapigs, (which become rigid in from ten to twenty minutes,) he divided the aorta and cava, in the abdomen, just above the bifurcation of these vessels—that done, he put into the ends of these divided vessels quills or tubes of glass, and by means of these he connected the vessels of the dead with those of the living animals of the same species, so that the blood of the latter was injected into the arteries and veins of the former, thereby establishing the circulation in the inferior limbs of the dead. This transfusion resulted in the removal of cadaveric rigidity in from

*This opinion is erroneous. The most copious hæmorrhage in the subjects of yellow fever does not prevent cadaveric rigidity.

six to ten minutes, and two or three minutes later, the limbs responded by motions excited through mucular nerves.*

It is then proved by these experiments, that the nerves and muscles which have lost their excitability, may have the latter reproduced by the influence of the blood, and even for a quarter of an hour after post mortem rigidity had pervaded and ruled the muscles.

The same result was obtained by operating in another mode more simple and more easily repeated: A rabbit or guinea-pig was divided transversely on a level with the inferior borders of the kidneys—a ligature was applied on the aorta, which suppressed the vascular communication between the two sets of vessels; little by little the muscular activity declined in the inferior limbs, and was replaced, ordinarily, in less than half an hour, by rigidity. After having been abandoned to this state for fifteen or twenty minutes, the ligature was removed, whereupon the circulation was re-established, and then, as in the preceding case, rigidity was removed and excitability reappeared in the muscles and motor nerves.

Finally, in another series of experiments, M. Brown-Sequard investigated the voluntary motions and sensibility, with a view to ascertain whether they might not be re-established in limbs which, without having been separated from the nervous centres, could, nevertheless, be reduced to rigidity from the suspension of the circulation. With this view, he tied the aorta below the renal arteries, in vigorous rabbits; in less than ten minutes sensibility was abolished in the parts below, and in two minutes longer voluntary motion ceased; irritability still continued for nearly half an hour; afterwards rigidity took place, and was allowed to persist a quarter of an hour; at which time the ligature was removed, the circulation was restored, and, as had been expected, the blood brought back voluntary motion and sensibility.

These new researches bear out the following conclusions:

1st. That rigidity in the cadaver does not prove that the muscles are dead.

2d. That the motory and sensory nerves lose in the limbs all power to act where there is no circulation, but recover their functions from the action of the blood.

3d. That the limbs of mammiferous animals, after having been kept for fifteen or twenty minutes in a state of rigidity analogous to that in dead bodies, can be restored to their normal state, that is, to irritability, sensibility, and voluntary motion.

LEON FOUCAULT."

The following account, translated by an individual unknown to us, is evidently a continuation of the experiments of M. Brown-Sequard, though the name is spelled differently. We correct the orthography in this particular.

"On the 18th of June, at eight o'clock in the morning, an assassin, condemned to death for murder, was executed at the Barrier St. Jacques. His headless body was given to a celebrated physiologist, M. Brown-Sequard, for the purpose of trying an experiment on the transfusion of

^{*} The exciting agent used was, as usual, electricity.

blood. He had, in operations upon animals, noticed that the muscles which were just becoming rigid, seemed to resuscitate under the influence of fresh blood injected into the veins. The dead body preserved its muscular irritability until seven in the evening, when the stiffness, always consequent on death, seized upon the whole muscular system. As it was too late to obtain blood from the hospitals, and as that of animals seemed to promise but little success, M. Brown-Sequard caused an assistant to make an incision in his arm, from which he took about half a pound of blood. This was passed through a linen cloth, and injected into the radial artery of the subject, a little above the wrist. The corresponding vein was opened, and the natural blood of the dead man, now perfectly black from want of oxygen, was made to yield its place to the fresh blood injected. By continuing the injection, it passed through the capillary vessels, from the arteries to the veins, and flowed up through the orifice cut to allow the old blood to escape. Though it entered of a brilliant red color, it came out as black as the natural blood of the subject. But, being moved about in the air, it soon recovered its red hue, when it was again injected, to be still again disgorged by the open vein. In about half an hour the hand became sensitive, and moved convulsively under the discharge of an electric battery, which previously produced no effect. Out of the nineteen muscles of the hand, twelve recovered their natural irritability, or sensitiveness, and three of them contracted or expanded throughout their whole length. This state lasted from nine o'clock till midnight, when it began to yield to the rigidity natural to all bodies deprived of life. At six in the morning another experiment was tried, but neither the battery nor a fresh infusion of blood excited the least appearance of motion. The experiment seemed to decide, beyond a doubt, that in the human body, as well as in animals, the approach of rigidity may be deferred for a considerable period, by the injection of fresh blood, and that by the further application of electricity, the muscles may be made to move as in the living subject."

In another Journal we have met with a statement showing that the French savans regard artificial circulation as restoring to the dead both sensibility and motion, in part, at least. But what is the test used to prove "this high argument?" Electricity! "Sous l'influence de cette circulation et au bout d'une demi-heure, la main de supplicié, par une sorte de resurrection partielle, redevint sensible et s'agita aux chocs reiteres des decharges electriques. Cependant tous les muscles ne se montrerent pas egalement sensibles." (See 2d. L'Illustration, Journal

Universel, Aug. 14th, 1851.)

The fundamental propositions advanced in the above report, so far from being original and altogether new, are comparatively old. It is now a half a score of years since Dr. Bennet Dowler, of New Orleans, not only investigated experimentally, and preoccupied the grounds recently taken by the French savans, but a vast deal more, without the aid of electricity, (vulgarly called thunder and lightning.) He has not restricted his experiments to the inferior animals, as dead guinea-pigs

and rabbits, (used by the French physiologists,) nor wholly to vivisections, but has experimented on hundreds of men, women, and children, without the all-powerful, but unphysiological forces generated by electrical batteries.

The general views of life and death presented in the above report, were long since brought forward in Dr. Dowler's essays on contractility, animal heat, capillary circulation, natural history of death, and, in other papers, with copious experimental illustrations. His ideas, and terms, (so far as the two languages will allow,) seem to have been adopted by MM. Foucault and Brown-Sequard, as novelties.

It is unnecessary to allude to Dr. Dowler's vast collection of unpublished researches upon these subjects. Soon after his experiments began, he published various extended monographs with experiments illustrative of the duration, degrees, progress, renewal, and decline of contractility and muscular motion, including the conditions that might be supposed to influence the muscles, as the nerves, the blood, hæmorrhages, the temperature, rigidity, diseases, and under the most varied manipulations and modifying circumstances. The reader and the French savans have only to look into the Medical Journals of Louisville, New York, New Orleans, and of other cities at home and abroad, to be convinced that the news from Paris is old, ("trop tard,") and that Dr. Dowler's claims to priority of discovery are entirely indisputable. It is now more than five years since Dr. Dowler, (as he informs us,) forwarded a number of copies of a pamphlet 39 pages, ("Experimental Researches on the post mortem Contractility of the Muscles,") to several members of the Academy of Medicine, and of the Academy of Sciences. Indeed, Dr. Dowler's discoveries in the muscular functions must have been known as early as the 5th of August, 1843. We have now before us a letter addressed to Dr. Dowler from the illustrious Louis, which we are permitted to use, and of which we will give a translation, showing that Dr. Dowler's paper entitled "Post mortem Researches," had been received in that city more than eight years ago. Now, in this very paper is announced Dr. Dowler's discovery of the excitation of post mortem contractility, by percussion, as well as several other discoveries, as post mortem caloricity, post mortem circulation, capillary action, etc., etc.

[TRANSLATION.]

Sir and honored confrere:—I know not how to thank you sufficiently for the extreme kindness with which you honor me, in addressing to me the two pamphlets which you have printed; one on pathological anatomy, and the other on what you call sun-stroke.

As to the subject of pathological anatomy, you have done, without doubt, that which no other physician has done till now; for it has been given to no person to make post mortem examinations a few minutes only after death, when cadaveric rigidity (one of the most certain signs of death,) exists, as yet to no great degree. You have been able to see that which few persons have seen—to establish lesions susceptible of changing quickly; and, if you have been able to collect in detail, and

until the last hour of the patients, the symptoms which they have experienced, you will do a thing very useful to science to publish what

you have seen.

As to what you call sun-stroke, the medical public cannot but read with a great deal of interest what you say, and, for my part, sir and honored confrere, I dare require you to pursue your researches, in order to have complete certainty that the facts observed by you, or rather the deaths of which you speak, are truly connected with the consequence of of the insolation.

Permit me, in conclusion, to persuade you to continue your valuable labors, to study rigorously the facts which you have collected, as you yourself propose. Have enough confidence in yourself to make them known to the medical public, to whom they will be serviceable, and please accept, sir and honored confrere, the assurance of my grateful and devoted sentiments.

Louis.

Paris, Aug. 5, 1843.

Dr. Dowler's method (percussion) and results are alike original. Physiologists had used, and they still use electricity as the means of exciting muscular action! an agent of great power—one that produces irregular and convulsed motions in dead animals. Sir Charles Bell himself admits that results thus obtained are fallacious: "for the nerves, dead or alive, may convey the galvanic power, like a wet cord."*

It is unecessary to reiterate in this Journal the results of Dr. Dow-ler's researches upon these subjects. It is sufficient to say that he has shown that the muscular force may be repeatedly excited, exhausted, and regenerated for many hours, and even after the appearance of post mortem rigidity, without electricity, and after the removal of the nerves and blood. Cadaveric rigidity is often readily removed by art; and then, in many cases, muscular contractions will follow with perfect regularity, the cadaver raising his arm from the floor to his breast, carrying weights in his hand—after, as well as before the removal of the

brain, cord, nerves, and blood.

The French savans have doubtless been deceived, as well in the nature as in the originality of their experiments. They had exhausted, temporarily, the muscular by the electrical force; they then set about injecting the blood-vessels with fresh living blood; in the meanwhile, the regeneration of the muscular force had been progressing, and had the operators injected no blood whatever, but delayed for an equal period, contractility would have returned; for the amputation of a limb, and the removal of the blood and blood-vessels, will not in the least diminish the contractility, though in the living state, Dr. Dowler has admitted that the blood and the nerves may contribute as auxiliary to the inherent forces of the muscles, being rather the essential conditions than the essential agents of motion, both voluntary and involuntary.

We venture to suggest another source of error into which the French savans have probably fallen. They tell us that cadaveric rigidity

having manifested itself in the guinea-pig, blood was thereupon injected, rigidity disappeared, and contractility returned. Now, we incline to think that it was the incidental manipulation of the animal, not the blood, that removed the rigidity; for Dr. Dowler's researches show, that in man, and in the alligator, how much soever they may be mutilated, rigidity may be, by forced motions, removed repeatedly, after which contraction can be excited for hours, and in the latter for three days! The rigidity will take place repeatedly, if the body be left perfectly undisturbed for a suitable time.

Dr. Dowler's researches prove that sensation and voluntary motion may exist independently of the brain. The French experimentalists seem to show that both of these fundamental functions can be revived, for a time, by the transfusion of blood from the living into the dead, even after the riger mortis. We wait for further proof, as the subject is not sufficiently ripe for safe speculation.

Let the French savans look at page 54 of the July number of this Journal, where they will see in Dr. D.'s last contribution, a summary statement of the principal laws of muscular contractility, cadaveric rigidity, etc., deduced from experiments commenced eleven years ago.

With respect to this last contribution of Dr. D., (so fundamental, not to say revolutionary, in its bearings,) we may remark, that, judging from sundry letters and from notices of the medical press, so far as we have seen, its reception has been very flattering.

It has been urged as an objection to Dr. D.'s papers and essays, that they are not sufficiently practical in their spirit and bearing. To this we reply, that the writings of Hunter, Harvey, and some others, were looked upon by the less sagacious of their cotemporaries as of little practical utility at the time, and too speculative in their tone for the age; but the lapse of years and the researches of organic chemistry have established as indisputable truths many of these then supposed speculations, and mankind are at this moment receiving the benefits and blessings derived from the experiments of those illustrious minds. So, in like manner, we anticipate glorious results, at some future day, from the untiring labors and ingenious experiments of Dr. D.; and if we cannot apply to practical purposes—to the coining of money—the important discoveries in physiological sciences, which our confrere has from time to time published to the world, we indulge the pleasing hope that another generation will reap the full benefits of his labors, and render homage to his name.—New Orleans Med. & Surg. Jour.

On the Endosmotic action of Medicines.—Dr. Cogswell lately read a paper on this subject at the Medical Society of London. After some remarks on the construction of the apparatus—the properties of different membranes to be examined—the well known deductions of Poiseuille, in his Memoir in the "Comptes Rendus" of the French Academy of Sciences for 1844,—the author proceeded to mention his own observations. The endosmometer of Dutrochet consisted of a glass tube, with

a somewhat bell-shaped moveable expansion called the reservoir, having a deep contraction round the middle for securing the membrane. The form of reservoir preferred by Dr. Cogswell was that of a bell-jar with a projecting rim round the larger orifice, the end of the tube and the inside of the reservoir being ground to fit one another. The reservoir had a capacity of eighteen drachms, and an internal diameter at the larger orifice of an eighth of an inch. The calibre of the tube was a fourteenth of an inch. To support the reservoir the tube was passed through a cork adapted to a hole in a leaden plate, which rested on the edge of the outer vessel. This was a glass cylinder, of such dimensions, that, on receiving the reservoir, a quantity of fluid, equal to the contents of the latter, would rise to the neck, leaving sufficient below the membrane. On consideration, the author had been led to adopt, for closing the reservoir, the cæcum of the sheep, as sold in a prepared state by the French, finding, in comparison with other membranes, that it produced the most marked results. The experiments of Poiseuille were then examined in the order observed in his Memoir.

Action of Purgatives.—Seidlitz water contained in the reservoir, being opposed to serum, ascended in the tube. Albumen was found in the reservoir, and sulphate of magnesia in the serum. Now, Seidlitz water causes an unusual quantity of albumen to appear in the alvine discharges, and of sulphate of magnesia in the urine. Hence the inference is, that this class of purgatives possesses the property of determining a flow of serum towards the bowels. The author remarked, that it might reasonably be questioned whether serum was a fair representative of the living fluid in the bloodyessels, or its accumulation in the bowels the only

physiological effect of the saline purgatives.

Tolerance of Medicines.—The author remarked, that endosmose was found by Poiseuille to stop at periods varying for different fluids. The outer fluid being then examined, presents a striated appearance from the incomplete diffusion of the foreign matter introduced in it. After shaking it, there is a renewed ascent of the column; and the same thing happens repeatedly. Poiseuille employed a solution of phosphate of soda and serum. The author repeated the experiment with a solution of the salt, of density 1060, and obtained similar alternations, except as regards the elevation following the second employment of the serum. He left it to be judged, whether the facts as stated would bear out the inference, that the tolerance of medicines arises simply from the circumstance, that "the membranes of the intestinal canal, after being long in contact with the same substance, become impregnated with it, and prevent it from entering so freely into the circulation."

Influence of Opium.—Opium and its salts check diarrhæa, and obviate the purgative tendency of other medicines. A solution of one part of nitre to eight of water was opposed by Poiseuille to serum, and produced an elevation in the tube for three quarters of an hour. While the endosmose was proceeding vigorously, the solution was withdrawn, and replaced by a similar one, containing muriate of morphia. After this the ascent continued, but with less intensity; it proceeded for an hour, ceased

an hour, and then the column began to descend. Hence, it is said, the presence of the morphia diminished the endosmose, then put a stop to it, and ended by producing exosmose, such being precisely its effect in promoting extirpation of the bowels. The author, however, believed, that if the experiment had been continued without the morphia, the result would have been nearly the same, as he had found that nitric by itself has but a feeble form of endosmose. To ascertain further whether opium exerts a peculiar influence on membranes unfavorable to endosmose, he had repeatedly opposed an aqueous solution to water, and from it produced much greater effect than some of the inorganic salts. The serum of the sheep inclosed in a reservoir, and opposed to distilled water, containing a grain to the ounce of muriate of morphia, produced a vigorous endosmose for above twenty-four hours. Added to syrup in the same proportion, its effect was not appreciable. He was thence led to believe there was not sufficient ground for characterizing morphia as a substance the presence of which puts a stop to endosmose, and renders

the membrane impermeable to either fluid.

Influence of Tobacco.—The decoction of tobacco is stated, by M. Poiseuille, to penetrate the membrane, and render it unfit for endosmose. A decoction of four parts of tobacco-leaves to forty of distilled water, was opposed to serum. There was a descent of the column in the tube. However, the density of the two fluids was not stated. The author having made a similar decoction, found that after boiling above an hour, the density did not exceed 1023, when it was not likely to produce endosmose, with serum having a density of probably not less than 1026. But a decoction of this strength, being opposed to distilled water, produced an elevation lasting for several hours; and further, a decoction of density 1052 opposed to serum of density 1031, produced a well-marked elevation of the column, which was found not to have stopped in twenty-one hours. The author proceeded to state, that having observed a great variety in the endosmose afforded by different solutions of the same density, he tried the following experiment:-Four endosmometers, closed with the prepared cæcum, were filled respectively with solutions of sugar, sulphate of magnesia, common salt, and nitrate of potash, and placed in distilled water; in half an hour the first fluid ascended 1-9 inch, the second, one inch, the third, 2 inches, and the fourth, ·8 of an inch; other membranes afforded corresponding, though less marked results. Thus the common salt was the most energetic at first, and the nitre the least so. But again, the syrup and sulphate of magnesia continued to ascend for several hours, while the common salt stopped in four hours and the nitre in less than two. Syrup, though it has a remarkable power of endosmose, is not a purgative, which Poiseuille accounts for by its being decomposed by the gastric juice. The author then extended the examination to classes of substances. The results obtained were arranged in a tabular form and laid before the Society. It was remarkable, that the sulphates from which experience has selected the most generally useful purgatives, had invariably a strong and continued action, while the class to which nitre belonged was comparatively feeble. Chlorate of potash and the iodide and bromide of potassium were among the substances which had the lowest place in the table. Gum and liquors showed a moderate degree of energy, but it continued uninterruptedly for weeks. The author, after entering into some further details, said, he mentioned these as coincidences which might prove useful aids to investigation, but without any view to the formative construction of a theory. From what proceeded, he was lead to the following conclusions:

1. That the division of substances into those which are favorable to endosmose, and those which on the one hand retard and annihilate it, by their influence on the membrane, and on the other render the membrane permeable, or reduce it to the condition of a filter, requires con-

firmation.

2. That the power of endosmose of different solutions is not regulated

entirely by their density, as already observed by Dutrochet.

3. That the purgative salts generally have an energetic form of endosmose, and that this is exerted with more steadiness and uniformity by those which medical experience has selected as most useful in ordinary circumstances.

4. That some of the other substances have marked peculiarities with regard to endosmose, which will probably assist towards explaining the

mode of action on the system.

Dr. Lankester thought that the Society and the profession were indebted to Dr. Cogswell for his original and interesting paper. It might not be regarded as practical; but many of the theories discussed by the author had resulted in practical applications. Investigations which proved the erroneousness of old theories were as valuable as those which established new ones. The practical man always has a theory to explain his practice; however disagreeable it was to give up an old theory with its resulting practice, all progress in science and art demanded it.

The investigation of the physical properties of matter had contributed greatly to our knowledge of the functions of life; and imperfect as was our knowledge of those properties of membranes called exosmose and endosmose, it had opened a field of useful inquiry. Dr. Cogswell's experiments showed at least that the theory which explained the action of saline purgatives by their increasing endosmose, was only partially true. They might, however, contribute to the explanation of the action of other medicines. The extraordinary endosmotic power of acetate of ammonia was worthy of remark; and whilst it showed that this power was not alone the cause of purgation, it might throw light on the action of that medicine. He was somewhat surprised at Dr. Cogswell's conclusions with regard to morphia, as the experiments of Poiseuille and Bachetti went to prove that it diminished and even reversed the endosmotic action of fluids in which it was contained. This explanation of its action in diarrhœa was thus rendered valueless. It should, however, be recollected, in reasoning from phenomena occurring out of the body to those taking place within it, how different were the conditions. In the human stomach and intestines we had a living surface covered with cells in a

constant state of development, and with mucus, which must necessarily modify any endosmotic action, even were that the most prominent function of these tissues. If Dr. Cogswell's paper only led to negative results, it would be valuable as indicating the necessity of caution on a subject

on which there had been a good deal of positive speculation.

Dr. Handfield Jones said, that in the paper just read there were two points to which he wished to refer. First,—Certain membranes of a homogeneous character altered the nature of the fluids which passed through them. In illustration of this he instanced the Malpighian tufts of the kidney, and the membrane of the aqueous humor of the eye. This fact was interesting in respect to endosmotic action, which was known to be so greatly modified, in many instances, by the kind of membrane employed. Second,—He referred to the case of the secretion from the kidneys, in which the blood containing the elements of the secretion was on one side of the homogeneous basement membrane, and a layer of albuminous semi-solid matter in the form of epithelium on the other; and inquired whether the elimination of the secretion might not be re-

garded as an endosmotic action.

Dr. Snow said that, although the subject of endosmosis was a very important one, it did not go far to explain the action of medicines, even of the purgative class. It might occasionally assist in the action of some of the saline purgatives, as Epsom salts, but this medicine would purge when given in repeated small doses, and so diluted as to be much less dense than the serum of the blood. One important point, which it was requisite to bear in mind respecting endosmosis, had been stated by Dr. Golding Bird-viz., that acetate of potash and other salts, when intended to act as diuretics, must be sufficiently diluted to enable them to be imbibed, otherwise they would set up endosmosis into the interior of the alimentary canal, and act as cathartics. Opium probably prevented purgation by diminishing the peristaltic action of the intestines. The theory of its diminishing the permeability of animal membranes would not explain its power of checking diarrhea, even if correct; for the absorption of fluids taken into the alimentary canal would be retarded, and this would have the opposite effect. In order to understand the action of medicines, a number of other laws must be taken into consideration besides those of endosmosis.

Mr. Chippendale commended the manner in which Dr. Cogswell had conducted his experiments, but thought he had not succeeded in showing that the action of inorganic salts, as purgatives, was the result of endosmosis. In the first place, the fluid found in alvine evacuations was not serum, and if it were a transudation of fluid, as the result of endosmotic action, we should naturally expect that it would take place chiefly through the coats of the stomach, and gradually become less along the course of the alimentary canal. Experience, however, had shown us that purgative salts act principally in the colon. Besides, if serum were really to pass through the coats of the alimentary canal by a process of endosmosis, it would be constantly going on, for the mucus which lubricated the internal surface of the tube was denser than serum. As a striking instance

against the view that purgative action was one of mere endosmosis of serum, he illustrated what took place when a dose of castor-oil was taken. He considered, in conclusion, that purgative salts did not act by causing an endosmosis of serum, but that probably the epithelial cells had much to do with the matter .- London Lancet.

Observations on the Sounds of the Heart. By RICHARD BROWN, Esq., M. R. C. S., L. A. C., &c., Cobham.-Few subjects, perhaps, have claimed more attention from physiologists than the one upon which I am about to offer some remarks, and I may add, none in which a greater

discrepancy of opinion has been manifested.

Harvey and Haller describe the contraction of the auricles as preccding those of the ventricles. Lænnec conceived that the contraction of the auricles followed those of the ventricles. Turner, Corrigan, Williams, Hope and Bouillaud, have shown the inaccuracy of Lænnec's opinion. Dr. Williams investigated this subject, and his inferences were confirmed by the Committees of the British Association—namely, that the contraction of the ventricles followed immediately that of the auricles.

The first sound of the heart was ascribed by Mr. Carlisle to the rush of blood into the great arteries; by Mons. Rouanet and others to the closing of the ariculo-ventricular valves; by Dr. Hope, to the collision of the particles of fluid in the ventricles; and by Dr. Williams, to the

muscular contraction of the heart itself.

The second sound was ascribed by Dr. Hope to the impulse of the blood from the auricles filling the ventricles; by Messrs. Carlile, Carswell, Rouanet, Bouillaud, and others, to the suction of the ventricles, causing the elevation of the sigmoid valves, and to the reaction of the

arterial columns of blood against these valves.

The experiments performed by Dr. Williams, assisted by Dr. Hope and others, in order to determine these points, proved that the first sound is produced by the muscular contraction of the ventricles, and that the second sound is caused by the reaction of the arterial columns of blood, tightening the semilunar valves at the diastole of the ventricles.

The first motion of the heart following the interval of repose is the systole of the auricle, which I consider accompanies the diastole of the ventricle; and the systole of the ventricle immediately follows its diastole, commences suddenly, and considerably diminishes the volume of

the organ.

On applying the ear or a stethoscope over the præcordial region, two sounds are heard following each other; the first is dull and prolonged, whilst the second is shorter and sharper. The first sound is produced during the diastole, and the second during the systole of the ventricles; and in support of this theory I will briefly state the circumstances under

which this opinion was formed.

Some few weeks since, attending a patient laboring under increased action of the heart, and whilst conducting an examination, I could distinctly appreciate the inward current of blood from the auricle to the ventricle, producing the first sound by suddenly distending this latter cavity. The apex of the heart striking against the walls of the chest in the neighborhood of the fifth and sixth ribs, communicated to the ear at this moment a shock (the heart's impulse.) Immediately followed the second sound, produced by the onward current of blood through the aortic opening, propelled by the contraction of the ventricles. I observed, moreover, that the first sound did not exceed the space in which the impulse was felt, but that the second sound was audible in nearly the whole extent of the chest, which would tend to strengthen the theory I have advanced, inasmuch as the sound produced by the diastole of the ventricle would be circumscribed, whereas that produced by the systole would be diffused.

Whilst my attention was directed to this subject, a case came under my notice in which a bruit de râpe was distinctly heard in the second sound of the heart, and over a considerable portion of the chest.

I diagnosed ossification of the aortic semilunar valves and arch of the aorta, believing that during the production of the second sound (systole) the current of blood was passing in this direction. The patient died shortly afterwards, and a post-mortem examination of the body disclosed the correctness of my opinion.—London Lancet.

OBSTETRICS.

On Relaxation of the Symphysis Pubis after Labor.—It is not an uncommon occurrence after delivery, to find relaxation of the pubic ligaments; but from the uncertainty of the symptoms developed by it, it is liable to be mistaken for disease or displacement of the womb. M. Marten, (Gaz. Médicale, Juliet,) hopes to throw some light upon the subject.

In all patients suffering from this affection, standing is peculiarly painful and difficult, so that the patient can barely walk a few paces even with the help of crutches. They also complain of more or less dysuria, with frequent micturition. If the hands are placed on the ilei while the patient attempts to walk, she will find that the hip of the leg which rests on the ground is pushed up, while the opposite, from contast seems lower than natural.

In treating this accident, M. Marten makes use of a steel girdle, which entirely encircles the pubis. By means of the support thus afforded, he has known a patient walk with ease, who a few days previously could with difficulty stand upon her feet.—Prov. Med. Journ.

RANKING'S ABSTRACT OF THE MEDICAL SCIENCES.

Just as the last form of our Journal was going to press, we received, through the politeness of Messrs. Lindsay & Blakiston, the January number of this most useful periodical, containing a retrospect of the more valuable portions of the journal literature of the last six months. To those acquainted with the merits of this work, we need say nothing in its praise; to all others, we most heartily commend it. Its prompt appearance in its American dress, reflects great credit upon its energetic publishers.